

A Study on the Factors of Value Added Tax in Bangladesh

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Abstract

The present study aimed to specify the factors of VAT mismanagement, to determine potential scopes for VAT for near future period and to provide policy recommendations. The study was conducted at 8 divisions in Bangladesh. The study was conducted at National level, Divisional level, District level, Upazila level and Business Centers levels. The study was Survey in nature. Some Expert Groups Consultations were done for result interpretations. Some case studies and user and professional group discussion also were done. Purposive sampling method was used for the study. Total 72 Bankers of different levels, 120 Businessmen of different level, 102 practitioners of different levels were selected. So, total 294 respondents were selected. Data were collected from primary and secondary sources. Primary data were collected from the respondents of the study area. Secondary data were collected from the books, journals, research report, annual report of different organizations, web site of National Board of Revenue and internet etc. The study findings reveal that all the identified factors have a direct influence on the national revenue. The tax compliance factors examined include tax understanding and taxpayer education, tax compliance cost, fines & penalties and taxpayer perception and attitudes toward complying with VAT laws. The study results inferred that the level of tax understanding and knowledge has a significant effect on national revenue. This is because a better understanding of VAT laws encourages compliance. The study results provide evidence indicating that Value Added Tax compliance cost is a major factor considered by taxpayers whether to comply with taxation laws. Effective imposition of fines and penalties play a vital role in improving tax compliance. Finally, the research study concludes that taxpayer perception and attitudes has a significant effect on tax compliance. It is therefore sensible for Bangladesh to enhance their taxpayer education activities to enable taxpayers have better understanding of various factors affecting tax compliance.

Key words: Value Added Tax, Factors, Sales Tax, Gross Domestic Product (GDP), Gross National Product (GNP), Per Capita Income, Employment, Ration.

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1. Introduction

Value-added tax in Bangladesh was introduced in 1991 replacing Sales Tax and most of Excise Duties. The Value Added Tax Act, 1991 was enacted that year and VAT started its passage from 10 July 1991. The 10 July is observed as National VAT Day in Bangladesh. Within the passage of 25 years, VAT has become the largest source of Government Revenue. About 56% of total tax revenue is VAT revenue in Bangladesh. Standard VAT rate is 15%. Besides these rates, there are several reduced rates locally called Truncated Rate for service sectors that are available. Different rates for different services are applied. Truncated Rates are 1.5%, 2.25%, 2.5%, 3%, 4%, 4.5%, 5%, 5.5%, 6%, 7.5%, 9%, and 10%.

Bangladesh VAT is characterized by many distortions, i.e., value declaration for product and service, branch registration, tariff value, truncated rates, many restriction on credit system, lump-sum VAT (package VAT) advance payment of VAT, excessive exemption etc. For many distortions, VAT-GDP ratio is about 4% here. To increase productivity of VAT, Government has enacted the Value Added Tax and Supplementary Duty Act of 2012. National Board of Revenue is the apex organization administering the Value Added Tax.

A modest uptick in revenue is apparent in recent years; previously NBR continues to be characterized by a weak policy framework, very limited administrative modernization, a high degree of administrative fragmentation, significant human resource constraints and weak enforcement mechanisms. At present NBR is increasing administrative modernization because many actions of VAT are done online, human resources are increasing and enforcement mechanisms are becoming strong.

Bangladesh, as an emerging developing country, is committed to augmenting revenue and achieving fiscal discipline with a view to increasing self-reliance. The external environment influencing the Value Added Tax (VAT) performance of Bangladesh has changed remarkably as the country became increasingly integrated with the global economy during the 1990s (McCarten, 2005). In recent years, the Government of Bangladesh has initiated some administrative and policy reforms in the VAT system. An improved VAT administration in association with some pragmatic policy initiatives has resulted in a modest improvement in the tax-GDP ratio of late. However, the performance is still unsatisfactory as compared to other countries at a similar stage of economic development.

The narrow tax base, widespread exemptions, and administrative inefficiencies are the main factors behind low tax-to-GDP ratio in Bangladesh compared to the neighboring/comparator countries. This also implies that tax reforms over the last decades could not bring about significant changes in Bangladesh's tax efficiency and productivity. In Bangladesh VAT revenue is the principal source of Government revenue. The rest of the revenue comes from non-tax sources like fees, charges, tolls etc. In the Financial Year (FY) 2014-15, total revenue was TK.182954 crore, of the total the share of tax revenue was TK.155292 crore (84.88%) and non-tax revenue was TK. 27662 (15.12%).

2. Objectives of the Study

In the context the present research program is formulated to study the factors of VAT in Bangladesh with the major objectives mentioned below:

1. To specify the Factors of VAT mismanagement.
2. To determine potential scopes for VAT for near future period.
3. To provide policy recommendations.

3. Methodology of the Study

3.1 Study area: The study was conducted at 8 divisions in Bangladesh. The study was conducted at National level, Divisional level, District level, Upazila level and Business Centers levels.

3.2 Study design: The study was Survey type. Some Expert Groups Consultations were done for result interpretations. Some case studies and user and professional group discussion also were done.

3.3 Sampling method: Purposive sampling method was used for the study.

3.4 Sample size and sampling plan : Total 72 Bankers of different levels, 120 Businessmen of different level, 102 practitioners of different levels were selected. So, total 294 respondents were selected.

3.5 Sources of data: Data were collected from primary and secondary sources.

3.6 Sources of primary data: Primary data were collected from the respondents of the study area.

3.7 Sources of secondary data: Secondary data were collected from the books, journals, research report, annual report of different organizations, web site of National Board of Revenue and internet etc.

3.8 Tools for data collection: Data were collected by using questionnaire

3.9 Method of data collection: Data were collected by face to face interview with the respondents.

3.10 Variables: The research variables were Bankers, Businessman, Teachers, Practitioners, and Service holders

Age-

Below 40 years

40-65 years

More than 65 years

Population to be studied – Total Minimum 300.

3.11 Analysis of data: Collected data were tabulated, categorized and analyzed by using computer Program Microsoft EXCEL.

4. Results and Discussion

The results obtained from the present Value Added Tax system Research in Bangladesh are sequentially given here after analysis along with necessary interpretations.

4.1. The Respondent and the Study Sites

The Mean respondents of the Studies as per age group selected as per objectives of the research program are presented here in the Table 1.

Table 1: Mean respondents of the Studies as per age group

Respondent	Below 40 years	40-65 years	More than 65 years	Total
Bankers	11	54	9	74
Businessman	18	68	21	107
Practitioners	12	64	37	113
Total	41	186	67	294

The results show that the major age groups of the respondents were 40-65 years being 186 in number which may be considered as sufficiently experienced to give answers to different research questions.

4.2 Factors of Vat

1. Gross Domestic Product (GDP)
2. Gross National Product (GNP)
3. Per Capita Income
4. GDP (PPP) Per Capita
5. Total Cost of Consumption
6. Household final consumption expenditure
7. Government Final Consumption Expenditure
8. Unemployment
9. Export
10. Import
11. Standard VAT ratio

1. Gross Domestic Product (GDP)

Gross domestic product (GDP) is a monetary measure of the market value of all final goods and services produced in a period (quarterly or yearly). Nominal GDP estimates are commonly used to determine the economic performance of a whole country or region, and to make international comparisons. Nominal GDP per capita does not, however, reflect differences in the cost of living and the inflation rates of the countries; therefore using a basis

of GDP per capita at purchasing power parity (PPP) is arguably more useful when comparing differences in living standards between nations.

The OECD defines GDP as "an aggregate measure of production equal to the sum of the gross values added of all resident and institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs).¹ An IMF publication states that "GDP measures the monetary value of final goods and services - that is, those that are bought by the final user - produced in a country in a given period of time (say a quarter or a year).²

Total GDP can also be broken down into the contribution of each industry or sector of the economy.³ The ratio of GDP to the total population of the region is the per capita GDP and the same is called Mean Standard of Living

2. Gross National Product (GNP)

Gross national product (GNP) is the market value of all the products and services produced in one year by labor and property supplied by the citizens of a country. Unlike gross domestic product (GDP), which defines production based on the geographical location of production, GNP indicates allocated production based on location of ownership. In fact it calculates income by the location of ownership and residence, and so its name is also the less ambiguous gross national income. GNP is an economic statistic that is equal to GDP plus any income earned by residents from overseas investments minus income earned within the domestic economy by overseas residents. GNP does not distinguish between qualitative improvements in the state of the technical arts (e.g., increasing computer processing speeds), and quantitative increases in goods (e.g., number of computers produced), and considers both to be forms of "economic growth".⁴

When a country's capital or labour resources are employed outside its borders, or when a foreign firm is operating in its territory, GDP and GNP can produce different measures of total output. In 2009 for instance, the United States estimated its GDP at \$14.119 trillion, and its GNP at \$14.265 trillion.⁵

The term gross national income (GNI) has gradually replaced the Gross national product (GNP) in international statistics.⁶ While being conceptually identical, the precise calculation method has evolved at the same time as the name change.⁷

¹ OECD". Retrieved 14 August 2014

² Callen, Tim. "Gross Domestic Product: An Economy's All". IMF. Retrieved 3 June 2016.

³ Dawson, Graham (2006). *Economics and Economic Change*. FT / Prentice Hall. p. 205. ISBN 9780273693512.

⁴ Daly, Herman E. (1996), *Beyond Growth*. Beacon Press

⁵ *Flow of Funds Accounts of the United States*" (PDF). Board of Governors of the Federal Reserve System. 17 September 2010. p. 9.

⁶ World Bank. "GNI, Atlas method". data.worldbank.org. Retrieved 2016-06-23.

3. Per Capita Income

Per capita income or average income measures the average income earned per person in a given area (city, region, country, etc.) in a specified year. It is calculated by dividing the area's total income by its total population.⁸

Per capita income is national income/total population.

Per capita income is often used to measure an area's average income. This is used to compare the wealth of one population with those of others. Per capita income is often used to measure a country's standard of living. It is usually expressed in terms of a commonly used international currency such as the euro or United States dollar, and is useful because it is widely known, is easily calculable from readily available gross domestic product (GDP) and population estimates, and produces a useful statistic for comparison of wealth between sovereign territories. This helps to ascertain a country's development status. It is one of the three measures for calculating the Human Development Index of a country.

4. GDP (PPP) Per Capita

gross domestic product (at purchasing power parity) per capita, i.e., the purchasing power parity (PPP) value of all final goods and services produced within a country in a given year, divided by the average (or mid-year) population for the same year.

Comparisons of national wealth are frequently made on the basis of nominal GDP and savings (not just income), which do not reflect differences in the cost of living in different countries (see List of countries by GDP (nominal) per capita); hence, using a PPP basis is arguably more useful when comparing generalized differences in living standards between nations because PPP takes into account the relative cost of living and the inflation rates of the countries, rather than using only exchange rates, which may distort the real differences in income. GDP (PPP) per capita is often considered one of the indicators of a country's standard of living,⁹ although this can be problematic because GDP per capita is not a measure of personal income.

5. Total Cost of Consumption

TCC or the Total Cost of Consumption serves as a replacement for TCO in the area of Cloud economics and Utility Computing. Total cost of ownership has been rendered irrelevant/insufficient/inadequate by the cloud delivery model - "ownership" is not relevant in cloud world because it doesn't matter who actually owns the infrastructure. Business unit and operational unit owners don't care if their company owns the infrastructure or not - they care what the app is costing them to use and how that impacts the P&L of their business.

⁷ Glossary:Gross national income (GNI)". Eurostat statistic explained. Eurostat. Retrieved 2016-06-23.

⁸ Per capita income The Free Dictionary

⁹ "Sarkozy attacks focus on economic growth (French president urges more emphasis on quality of life)", The Guardian, 14-09-2009.

What should be measured is the Total Cost of Consumption (TCC), which measures the cost per unit of consumption of IT services. TCC is the foundation for real economic improvement of IT services and applications in an on-demand/cloud world. Once the TCC is established, it unlocks the ability to baseline cost efficiency, benchmark positions, and budget with accuracy to improve the cost effectiveness of IT consumption.

TCC becomes even more relevant with the global focus in Service Integration And Management (SIAM). Since SIAM consumes services (business, IT and non-IT services) from multiple service providers, it becomes utmost important that cost that organization incurs for consumption of these services is rightly factored. This cost is reflected by TCC. TCC would include:

- a) Cost of service which could be the subscription cost, provisioning cost, etc.
- b) Cost of maintenance of services
- c) Administrative costs
- d) Cost of changes etc.¹⁰

6. Household final consumption expenditure

Household final consumption expenditure (HFCE) is a transaction of the national account's use of income account representing consumer spending. It consists of the expenditure incurred by resident households on individual consumption goods and services, including those sold at prices that are not economically significant. It also includes various kinds of imputed expenditure of which the imputed rent for services of owner-occupied housing (imputed rents) is generally the most important one. The household sector covers not only those living in traditional households, but also those people living in communal establishments, such as retirement homes, boarding houses and prisons.

The above given definition of HFCE includes expenditure by resident households on the domestic territory and expenditure by resident households abroad (outbound tourists), but excludes any non-resident households' expenditure on the domestic territory (inbound tourists). From this national definition of consumption expenditure may be distinguished the household final consumption expenditure according to the domestic concept which includes household expenditure made on the domestic territory by residents and inbound tourists, but excludes residents' expenditure made abroad.

HFCE is measured at purchasers' prices which is the price the purchaser actually pays at the time of the purchase. It includes non-deductible value added tax and other taxes on products, transport and marketing costs and tips paid over and above stated prices.¹¹

¹⁰ Jha, Sumit; Kumar, Rakesh (2015). Making SIAM Work - Adopting Service Integration And Management For Your Business. India: Alethia Publishing. pp. 12, 117, 139. ISBN 978-8192043388.

¹¹ F. Lequiller, D. Blades: Understanding National Accounts, Paris: OECD 2006, p. 126

Components

Household final consumption expenditure includes the following components:

- a) households' purchases of products for their everyday needs (e.g. food, clothing, cars, rents, personal services)
- b) households' partial payments for products provided by the general government (e.g. tickets to public museums and swimming pools)
- c) households' payments to the general government for licences and permits (e.g. fees for issuing passports)
- d) imputed rents for services of owner-occupied housing
- e) household's own account consumption of outputs produced by unincorporated enterprises owned by households (e.g. own-consumption of milk produced on a farm)
- f) income in kind earned by employees (free or reduced train tickets for railway employees)
- g) households' consumption of Financial Intermediation Services Indirectly Measured (FISIM)

7. Government Final Consumption Expenditure

Government final consumption expenditure (GFCE) is an aggregate transaction amount on a country's national income accounts representing government expenditure on goods and services that are used for the direct satisfaction of individual needs (individual consumption) or collective needs of members of the community (collective consumption).

It consists of the value of the goods and services produced by the government itself other than own-account capital formation and sales and of purchases by the government of goods and services produced by market producers that are supplied to households - without any transformation - as social transfers in kind (for more detail see for example¹²)

Data

Data on government final consumption expenditure shed light on the involvement of governments in providing goods and services for the direct needs of the population. A high government share in the provision of individual consumption goods and services is often found in countries known as welfare states. This may be illustrated by looking at data for the European Union (downloadable from Eurostat's database providing figures on government expenditure):

Approximately one quarter of the economy-wide final consumption expenditure in the European Union of 27 member states is made by governments; countries with relatively large government shares in final consumption expenditure are Denmark, Luxembourg, the Netherlands, Finland and Sweden (around one-third of their final consumption expenditure).

60% of the governments' final consumption expenditure in the European Union of 27 member states is individual consumption; the largest shares of individual consumption in

¹² F. Lequiller, D. Blades: Understanding National Accounts, Paris: OECD 2006, p. 127-130

government final consumption expenditure are observed for Sweden (more than 70%). These findings mirror the importance of social transfers in kind in European countries, where the share of household final consumption expenditure in actual final consumption of the households is often less than 80%.

8. Unemployment

The state of being without any work both for an educated & uneducated person, for earning one's livelihood is meant by unemployment. Economists distinguish between various overlapping types of and theories of unemployment, including cyclical or Keynesian unemployment, frictional unemployment, structural unemployment and classical unemployment. Some additional types of unemployment that are occasionally mentioned are seasonal unemployment, hardcore unemployment, and hidden unemployment.

The clearest cases of involuntary unemployment are those where there are fewer job vacancies than unemployed workers even when wages are allowed to adjust, so that even if all vacancies were to be filled, some unemployed workers would still remain. This happens with cyclical unemployment, as macroeconomic forces cause microeconomic unemployment which can boomerang back and exacerbate these macroeconomic forces.

9. Export

Export means supply of any goods or services from within Bangladesh to outside the geographical boundary of Bangladesh including the territorial waters of Bangladesh. The term export means sending of goods or services produced in one country to another country. The seller of such goods and services is referred to as an exporter; the foreign buyer is referred to as an importer.¹³

Methods of export include a product or good or information being mailed, hand-delivered, shipped by air, shipped by vessel, uploaded to an internet site, or downloaded from an internet site. Exports also include the distribution of information that can be sent in the form of an email, an email attachment, a fax or can be shared during a telephone conversation.

10. Import

An import is a good brought into a jurisdiction, especially across a national border, from an external source. The party bringing in the good is called an importer.¹⁴ An import in the receiving country is an export from the sending country. Importation and exportation are the defining financial transactions of international trade. In international trade, the importation and exportation of goods are limited by import quotas and mandates from the customs authority. The importing and exporting jurisdictions may impose a tariff (tax) on the goods.

¹³ Joshi, Rakesh Mohan, (2005) International Marketing, Oxford University Press, New Delhi and New York. ISBN 0-19-567123-6

¹⁴ Joshi, Rakesh Mohan, (2009) International Business, Oxford University Press, New Delhi and New York ISBN 0-19-568909-7

In addition, the importation and exportation of goods are subject to trade agreements between the importing and exporting jurisdictions.

Direct-import refers to a type of business importation involving a major retailer (e.g. Wal-Mart) and an overseas manufacturer. A retailer typically purchases products designed by local companies that can be manufactured overseas. In a direct-import program, the retailer bypasses the local supplier (colloquial middle-man) and buys the final product directly from the manufacturer, possibly saving in added cost data on the value of imports and their quantities often broken down by detailed lists of products are available in statistical collections on international trade published by the statistical services of intergovernmental organizations (e.g. UNSTAT,¹⁵ FAOSTAT, OECD), supranational statistical institutes (e.g. Eurostat) and national statistical institutes. Industrial and consumer goods.

11. Standard VAT ratio

Standard VAT ratio is an important factor for generating more VAT.

4.3. Important sectors for VAT system implementation in the country

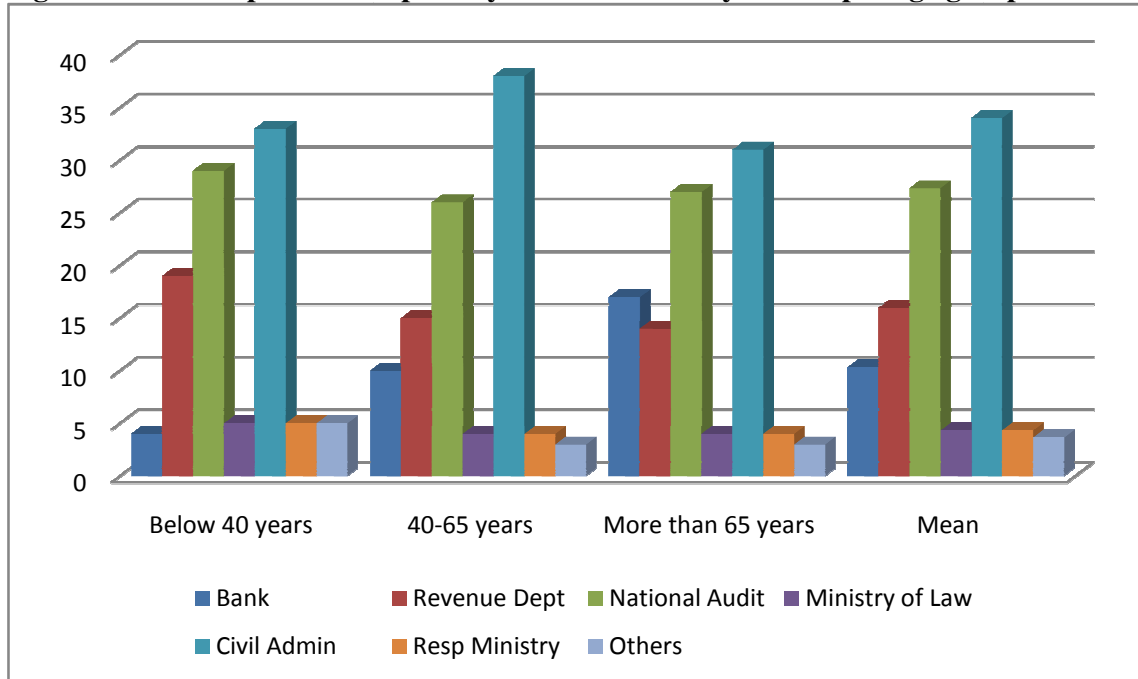
The results found on the identification of important sectors of VAT system implementation in the country are given in the Table 2 and 3 and in the Figs. 1 and 2. The results show that the civil administration mostly dominated the system as 34% followed by national as 27% response priority scores.

Table 2: Respondent's percent priority scores on VAT system as per age group

Departments	Below 40 years	40-65 years	More than 65 years	Mean
Bank	4	10	17	10
Revenue Department	19	15	14	16
National Audit	29	26	27	27
Ministry of Law	5	4	4	4
Civil Administration	33	38	31	34
Respective Ministries	5	4	4	4
Others	5	3	3	4
Total	100	100	100	100

The results found on the identification of important sectors of VAT system implementation in the country are given in the above table and figure. The results show that the Civil administration mostly dominated the system as 34% followed by national as 27% response priority scores.

¹⁵ "United Nations Statistics Division". Unstats.un.org. Retrieved 2013-03-25.

Figure 1: Column percent for priority scores on VAT system as per age group

The results reveal that the distribution of the over site from national, divisional and business centers were 97 to 99 being insignificant. It clearly indicate that the VAT System implementation is now facing problems throughout the country in a similar manner, that under the overall dominance of Civil Administration.

Table 3: Respondent's percent priority scores on VAT system as per site

Departments	National	Divisional	Business Centers	Total
Bank	3	9	8	20
Revenue Department	19	15	26	60
National Audit	23	21	23	67
Ministry of Law	5	4	12	21
Civil Administration	37	42	21	100
Respective Ministry	6	5	4	15
Others	5	3	3	11
Total	98	99	97	294

Table 4: Tax Collection Cost

Country	Cost
Japan	1.71%
Canada	1.33%
France	1.31%
United Kingdom	1.14%
Bangladesh	0.38%

Tax Collection Cost has shown in the above table. From the result it was found that in Japan, the tax collection cost was the maximum which was 1.71%. On the other hand in Bangladesh, tax collection cost was 0.38%.

Table 5: Towards Ideal Tax Composition

Financial Year	Direct Tax Share (%)	Indirect Tax Share (%)
1972-1972	9.72	90.28
1976-1977	15.90	84.10
1980-1981	13.79	86.21
1987-1988	17.20	82.80
1989-1990	16.50	83.50
1990-1991	20.03	79.97
1995-1996	15.22	84.78
2000-2001	19.44	80.56
2005-2006	21.83	78.17
2008-2009	27.17	72.83
2009-2010	28.09	71.91
2012-2013	34.55	65.45
2014-2015	36.18	63.82
2021-2022	50.00	50.00

Towards Ideal Tax Composition has shown in the above table. From the result it was found that since 1972 the direct tax share percentage was increasing each and every year. In 2014-2015 the direct tax share was 36.18% and it was expected 50% in 2021-2022. The result revealed that since 1972 the direct tax share percentage was increasing each and every year. In 2014-2015 the direct tax share was 63.82% and it was expected 50% in 2021-2022.

Table 6: Share of VAT in Total Tax for the Period of 2008-2014

	2008	2009	2010	2011	2012	2013	2014
Total Tax	47435.66	52527.25	62042.16	79403.11	95058.99	109151.73	120512.83
VAT	17671.36	20146.85	24468.05	30190.68	35777.43	41182.42	44571.01
VAT % of total tax	37.25	38.36	39.44	38.02	37.64	37.73	36.98

Source: NBR Annual Report 2012-13 and Bangladesh Economic Review 2015

Share of VAT in Total Tax for the Period of 2008-2014 has shown in the above table. From the result it was found that in 2008 the share of VAT percentage in total tax was 37.25% and each and every year this share was increasing in each and every year.

5. Recommendation

The recommendations of the study are as follows:

1. The VAT implementation should be streamlined professionally through the NBR Administration removing the Civil and related administrations more accountability.
2. The positive performance skill of the VAT fixer and collector should be strengthened. For this reason all the NBR staffs should be regularly trained on VAT matters; employees who are more conversant with VAT activities are supposed to engage with the social platform users to share the knowledge on how and when to pay their VAT online. This will ensure improved compliance rate.
3. The study recommends the managements should ensure they commitment level towards the adoption of VAT via social platform is enhanced. This will ensure effective policy implementation that will ensure their staffs are also encouraged to the VAT collection commitment. The management should come up with evaluation strategies on collecting VAT via social platform. The management should ensure they take part in training and motivating employees on the importance of the social commerce VAT compliance both to NBR and to the nation.
4. The import and agriculture sector VAT system should be made as per processing costing and primary consumption based

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