

Perceived Value Added Tax (VAT) Compliance in Nepal

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ABSTRACT

These research willpowers consider the perceived VAT compliance for VAT collection in Nepal. The specific objectives are: analysis of the perceived VAT compliance for collection and current status of VAT of Government of Nepal. The study follows descriptive and explanatory research designs to explore the VAT compliance and its problems, prospects, policies and the ability of the Government of Nepal to collect VAT. The current study has based on primary data to measure perceived VAT compliance for VAT collection and status of the VAT conducting field survey using pre-structured questionnaires. Altogether 400 respondents from the four categories are interviewed: 100 from VAT payers, 100 from VAT administration, 100 from VAT experts and 100 from business community all over the country, respondents were requested to indicate their degree of conformity with specified statements using 5-point scale. The regression results of perceived issues show that the sign of all the independent variables are as per priority and expectation. The computed F-statistic is also higher than table value at 99% level of significance indicating that there is a presence of relationship, as adjusted $R^2 : 0.37912$. The observed adjusted R^2 shows that the issues regarding administrative efficiency of VAT and other independent variable is affected administrative efficiency for VAT collection to the extent of 39.1% point. It shows that the variation in dependent variable is explained to 37% by the variables of independent variables included in the model

Key words: *Complex, Compliance, VAT collection, Perceived*

1. Introduction

In the Eighties, various countries adopted various tax reform programs to maintain a sound macroeconomic policy. As the adoption of reform program was at the heart of worldwide policies, this program was in swing in Nepal in 1990's. During 1990s, the concept of VAT existed in various official documents in Nepal, expressed the view of introducing VAT in the Eighth Five Year Plan. The Nepalese government revealed its intention for the adoption of various reform programs to promote market oriented economy in the Eighth Plan (1990-1995)

document. In a process to reform task policy, it has mentioned that sometime in the mid-plan period a VAT will be introduced in the country. Before that VAT was completely unknown to the general people of Nepal. After the restoration of democracy in 1992/93, a two-tier sales tax system was in function at that period under this system dealers and distribution of nine-selected items were required to register for sales tax purpose and collect tax on their sales. It was extended further to five more items in 1993/94. Only the amount of tax paid to manufactures was allowed to credit.

Further, sole distribution or agents of the foreign firm or companies and their wholesalers were also required to register for the purpose of collection of sales tax. As a part of its liberal economic policy, the government asked donors to study the VAT system. Finally, a VAT task force was created in the Sales Tax and Excise Department in 1993. In general the prime goals of VAT administration are to promote voluntary compliance and to promote the VAT revenue by effective, efficient and economical way. Identification of tax payers, tax registration, processing of returns, tax audit, assessments, collection, credit, refund and control of stop filers are main functional areas of tax administration. In the Nepalese periphery, Ministry of Finance is the main responsible body for collecting financial resources and managing the public expenditure. Department of Customs, Revenue Administration Training Centre, Department of Revenue Investigation and Inland Revenue Department are the wings of Ministry of Finance. Previously the VAT was administered by Department of Value Added Tax. By 2001/02, the government merged the Department of Taxation and the Department of Value Added Tax and named it "Inland Revenue Department (IRD). IRD is currently responsible for the administration of the taxes like Income Taxes, Corporate Taxes, Value Added Tax, Excises and certain fees and duties like Entertainment fee, Film Development Fee, Tourism Development Fee, Liquor control duty, Smoking liquor duty, special fee, etc. Likewise the department is also responsible for monitoring the non-tax revenue of the Government. This Department is located in the Kathmandu Valley. Under IRD there are 21 Inland Revenue Offices through the country. These offices and department jointly administer the VAT as well as income taxes. The Government of Nepal has the authority to appoint Tax officers in required

numbers. Similarly, the jurisdiction of a Tax officer should also be prescribed by the Government.

All the tax officials are the civil servants under the revenue service. Thus, IRD is the authority to mobilize inland revenues including VAT. The IRD has functional organizational structure. From operational point of view it has been divided into two wings. One is policy related and other is operational wing. The operational wing contains six functional works and these are taxpayer service, tax audit, investigation, collection, tax refund and others. Similarly policy related wing contains the sections related to personnel administration. The Government of Nepal may delegate tax administration related authority to other government officer. Similarly the VAT Act has provided the authority to the Government to define the jurisdiction of tax officers. Thus the department carries out the functions such as tax administration, making tax policy, tax treaty and International taxation, review and appeal related tax matters, advance ruling, tax enforcement and investigation, tax audit, tax refund, excise and liquor administration, tax payer services. (Adhikari, 2002).

The VAT Act was passed in 1996 by the parliament. The government in 1997 approved VAT Regulations. In the same year, the department of sales Tax and Excise were renamed as the Department of Value Added Tax (VAT). After a year, the Ministry of Finance approved nine volumes of manuals. Furthermore, VAT Taskforce organized a various discussion and interaction program related to VAT in different parts of the country. Various introductory brochures were published and distributed to the potential taxpayers, businessmen and the administrative staffs. The

VAT was initially scheduled to be effective from July 1997 (Khadka, 2003). The government planned to register the potential taxpayer in VAT from this period. In support of VAT, the government decided to rationalize the tax structure by educating the rate of income tax, sales tax and custom duties in advance. The VAT was to replace the Hotel Tax, the entertainment Tax and the Contract Tax. For this purpose the VAT task force was preparing its work in accordance with the schedule. Meanwhile the private sector of business field opposed the government policy on adoption of VAT. Nepal Chamber of Commerce held a nationwide discussion program among traders, businessmen, industrialists and their representative association in March 1997 to collect the attitude towards the introduction of VAT in Nepal.

This research study focuses on how effectively and efficiently government has been collecting VAT since the implementation of VAT. This demonstrates that the cost of VAT administration and compliance is immoral indeed much greater in developing and transitional economies than in developed economies. The advantages of the VAT in controlling evasion are easily exaggerated. The VAT does not administer itself; the tax requires essentially the same type of audit activity and the same kinds and quantities of other administrative resources as needed under a single stage tax, whatever the level. The tax credit type of VAT, however, does have three anti-evasions features not present in retail tax. In one hand Nepal is ranked 32nd among 43 countries in the Asia-Pacific region, and its overall score is below the regional and world averages (Economic freedom, 2018). Nepal is the poorest country in South Asia and the 17th poorest in the world out of 193 countries (Economic survey, 2015). Approximately 25 percent of Nepalese live below

the poverty line. In other hand Nepal has high tax rate in the world high tax rate ranking positioned 22nd in total ranking of 193 countries (World Bank, 2018). Nepal is the 122 corrupt nations out of 175 countries (Transparency international, 2017). Corruption Rank in Nepal averaged 127.64 from 2004 until 2017. There is a substantial difference in poverty levels among Nepal's various ethnic and caste groups, and between different regions of the country. An unemployment rate of 42 percent has created a sense of vulnerability and hopelessness in parts of rural Nepal. More than half of the country's population is under the age of 35, and each year, more than 300,000 of these young people join the ranks of those looking for work the total of 4,000,000 Nepalese are in abroad (economic survey, 2018), many either striving to go abroad as unskilled labor or languishing as part of the unproductive workforce (Economic survey, 2015).

2. Literature review

Shortly after the First World War, the basic principles were developed in both nations (Adams, 1921; Siemens, 1921). In the 1950s there was a revival of interest in VAT in Western Europe and America (Laure, 1952; Huiscamp, 1954; Schmblders, 1956; Shoup, 1955). Studenski (1940) constructed a general ethical philosophical foundation for the use of VAT, and developed and related to VAT a "cost of services variant" of the benefit principle of taxation justice. In the same year, Senator O'Mahoney introduced the value added concept in proposed federal legislation (O'Mahoney, 1940). The experience of the first sixty years show that VAT that had been implemented in various countries and had achieved success as expected. An analysis of the results of the first sixty years

revealed that the annual increment of this tax was not much higher than the increase rate of the former sales tax (Kandel, 2001). As suggested by Barro (1990) in his endogenous growth model and Keynesian in his new growth theories, taxes affect the distribution of income and the nature of the effect on the overall economic outcomes depends on the type of the tax system. This is proved by the study of (Kneller, 1999), where distortionary taxation reduced growth, whereas the non-distortionary taxation increased growth.

. The tax credit type of VAT, however, does have three anti-evasions features not present in retail tax. In one hand Nepal is ranked 32nd among 43 countries in the Asia–Pacific region, and its overall score is below the regional and world averages (Economic freedom, 2018). Nepal is the poorest country in South Asia and the 17th poorest in the world out of 193 countries

Six of the eight countries that form part of the SAARC comprises of Nepal, India, Bangladesh, Maldives, Sri Lanka, Bhutan, Afghanistan and Pakistan. The VAT was introduced by Pakistan in 1990, Bangladesh in 1991, Nepal in 1997, Sri Lanka in 1998, India in 2003 and the Maldives in 2011. Afghanistan and Bhutan still do not levy VAT. Afghanistan and Bhutan, levy a standard destination based consumption type tax credit method VAT, extend right through the retail level (Khadka, 2015). Afghanistan currently levies some domestic trade taxes, including the business receipt tax and has been considering the introduction of a VAT since 2007. To this effect, a VAT bill has been presented the parliament in 2014 that proposes to introduce VAT with registration threshold of 200 million AFS and a standard rate of 10%. Such services as health, education, basic food stuff, books, basic materials used for the households’ purpose etc. will be zero rated. Bhutan basically levies sales tax at the level of manufacturing and importation

Table: 1
Status and provision VAT in SAARC VAT indicator analysis.

Details	SAARC countries							
	Nepal	India	Pakistan	Bangladesh	Sri Lanka	Maldives	Bhutan	Afghanistan
Application year	1997	2003	1990	1991	1998	2011	-	-
Standard rate	13%	12.5%	17%	15%	12%	8%		
Multiple rate	--	1, 4, 8, 14,20, 24%	--	--	--	--	-	-
Threshold	5 and 1 million	5 million	5 million	6 million	12 million	1 million	--	--
% of total TR	27.52	9.8%	37.7	44.2%	25.3		16.3	
% of GDP	6.4%	0.7%	3.7%	5.5	3.3%	-	2.7st	
Percapita \$	1.35	1.8	1.92	1.37	0.9	1.69	1.8	2.03
Growth rate	4.58	6.6	4.24	6.55	4.8	1.5	5.46	-2.4
Population	28.98m	132.4m	19.32m	16.29m	20.79m	0.42m	0.79m	34.65 m

Source: IMF report, SAARC countries government statistics, economic survey and annual IRD report of SAARC countries.

In the SAARC region, VAT is levied on the value added at all the stages in the process of import, production and distribution. All the VAT levying

on SAARC countries have fixed registration threshold under the VAT, where the business, irrespective of their position in the production

and distribution chain, (i.e. importers, manufacturers, wholesalers and retailers), with the turnover above the registration threshold are required to register and those below the registration threshold have an option to register voluntarily. While VAT is levied on the value added, the amount of value added is not calculated directly for the purpose of assessing tax;

The producers and suppliers are the agents for tax collection on behalf of the Department or VAT administration. Usually they collect VAT on sales and deposit the collected amount after crediting the tax (if any amount remains) in prescribed public treasury account. Tax should be collected in selling price that comprises the costs related to transportation and distribution expenses as well as profit. Excise duty, custom and other tax except income taxes are also included under the selling price. But the trade discount and trade commission are not included. A person who is not registrant is not entitled to collect tax. The collection of VAT is not the responsibility only of the business community but also of the Revenue Offices. In Nepalese context, if the taxpayer fails to deposit collected tax by regular system, the tax officer may implement various methods and measures to collect the tax arrears. These methods they may employ are as follows (Adhikari, 2003).

Nepal has adopted “Inclusive Basket System” which means board-based tax coverage. Under this system all transactions regarding transfer, sales, supply, imports and exports of goods and services, where value added exists are taxable, except some special provisions. The Value Added Tax Act 1995 has made provision for exempted goods and services under special law. So this study expects positive relationship legal provisions on administrative efficiency and effectiveness of VAT and negative relationships with VAT evasion.

3. Research methodology

The study has attempted to examine the perceived VAT compliance for VAT collection. VAT rate complication, legal provision (VAT Compliance), administrative efficiency, VAT efficiency, and leakages of VAT effect are examined. Population and sample: for analyzing the effectiveness of VAT views of stakeholders were collected through opinion survey through structured questionnaire. For this purpose, the stakeholders from VAT payers, VAT experts, VAT administration and business community in the country are taken as the population of the study. Conveniently for opinion survey analysis 475 structured questionnaires were distributed but 400 have been responded analyzed to measure the VAT compliance. An equal sample size of 100 questionnaires from each category of stakeholders has been analyzed. For this purpose, an attempt was made to determine a representative sample size. Sample size determination: The following method was used for determining sample size for the study in case of unknown population.

$n = z^2 \frac{p \cdot q}{e^2} \dots \dots (1) = 384$ Where, Z= 95% confidence level of confidence.

P = Assuming probability of occurring p is 0.50 (for P unknown, the maximum value of the product

$p \times q$ is achieved when p is taken 0.50). $q = 1 - p$, $= 1 - 0.50$, $= 0.50$ although statistically the total sample size (n) is determined to be 384, a total of 384 respondents were determined.

However, 100 from each category of respondents such as VAT payers, VAT experts, VAT administration and Business community from various provinces were selected in view of the possibility of nonresponse from respondents. This study requires only primary data to analyze VAT compliance for VAT collection. Perceptions of stakeholders are collected as primary data for the opinion survey; a questionnaire was structured on a 5-Point Likert-scale. The data has been collected from various parts of Nepal through administration of questionnaire. A structured questionnaire using

Likert type five-point scale had been used to collect the primary data. The questionnaires were divided into three parts. The respondents were requested to indicate their degree of conformity with specified statements using 5-point scale anchoring as 1 for strongly disagree, 2 for disagree, 3 for slightly agree, 4 for agree and 5 for strongly agree.

For this purpose, the stakeholders from VAT payers, VAT administration, VAT experts and business community in the country were selected

for opinion survey analysis. VAT payers include all the consumers, who consume goods and services i.e. farmers, professionals, businessmen and housewives. Similarly, VAT administration includes the VAT officers from Province No. 2, 3, 4 and 7, and VAT experts include academicians, researchers, retired officers and auditors, and business community includes manufacturer, trader, service provider and others.

Table: 2
Questionnaire distribution and collection

S.N.	Respondents categories	Respondents covered	Sample	Collection	Collection%	Used
1.	VAT payers	Farmers 20%	115	106	92.17%	100
		Professionals 30%				
		Business man 30%				
		Housewife 20%				
2.	VAT Officers	Province 2 10%	115	102	88.69%	100
		Province 3 65%				
		Province 4 20%				
		Province 7 5%				
3.	VAT experts	Academics 25%	115	100	86.95%	100
		Researchers 25%				
		Retired officers 25%				
		Auditors 25%				
4.	Business community (Manufacturing and distribution channel)	Manufacturing 25%	115	101	87.82%	100
		Trading 25%				
		Service 25%				
		Others 25%				
Total			460	409	88.91%	400

A sample has been selected from each category of VAT payers, VAT administration, VAT experts, and business community. For this purpose, attempt has been made to determine a representative sample size, and then equal numbers of respondents were selected from each of the strata. The sample frame, collection of questionnaire from each category of respondents and percentage thereof are presented below:

Model Specification Model: Perceived VAT compliance for VAT collection as a dependent variable a multiple regression analysis is used to

identify the factors affecting VAT compliance. For the analysis, VAT compliance in VAT collection (VAT) is taken as dependent variable whereas it is argued that VAT rate complication (VRC), VAT evasion (EV) and incentive for VAT collection (IVC) are the factors affecting administrative efficiency for VAT collection. The study has attempted to examine the relationship between impact of VAT compliance for VAT collection, descriptive and explanatory research design has been applied. VAT rate complication, VAT compliance, VAT evasion, VAT efficiency, and leakages of VAT effect are examined.

$$VCVAT = \beta_0 + \beta_1 VRC + \beta_2 AdmE + \beta_3 EVC + \beta_4 IVC + \dots + e_i$$

Where, VCVAT represents Value added tax compliance for VAT collection
 AdmE represents administrative efficiency for VAT collection,

EVC represents evasion for VAT collection
 VRC represents VAT rate complication
 IVC represents Incentives for VAT collection

4. Result and Discussion

If a person provides information with sound evidence showing that a business has evaded or attempted to evade all or some portion of the tax, that person will be rewarded with the amount equal to 20% of the amount of tax collected on

the basis of such information. Regarding various provisions of the VAT Act and VAT rules and regulations, all the four categories of respondents were asked to rate ten statements on the 5-point scale. All the responses of the respondents are presented in the table (Table:3) given below:

Table: 3
Percentage distribution of respondents in the scale of response on various statements of issue on the 'VAT compliance for VAT collection.

Statements	Respondents	No. of Respondents	percentage distribution of respondents					Scores	
			Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	Mean	Standard deviation
*VAT policy of the Government is satisfactory.	VAT payers	100	2	16	42	34	6	3.26	0.87
	VAT officers	100	-	6	31	48	15	3.72	0.79
	VAT experts	100	6	14	42	36	2	3.14	0.89
	Bus. community	100	11	33	40	13	3	2.64	0.94
Overall response		400	4.75	17.25	38.75	32.75	6.5	3.62	0.95
*The reformed VAT system will raise more revenue.	VAT payers	100	-	12	25	51	12	3.63	0.84
	VAT officers	100	2	12	19	44	23	3.74	1.01
	VAT experts	100	1	6	23	48	22	3.84	0.87
	Bus. community	100	9	15	28	36	12	3.27	1.13
Overall response		400	3.00	11.25	23.75	44.75	17.25	3.62	0.99
*Governments VAT policy is big challenges for VAT payers and Bus. Community.	VAT payers	100	-	24	24	46	6	3.34	0.91
	VAT officers	100	10	37	43	6	4	2.57	0.90
	VAT experts	100	1	22	33	33	11	3.31	0.97
	Bus. community	100	2	11	32	33	22	3.62	1.01
Overall response %		400	3.25	23.5	33.0	29.50	10.75	3.21	1.02
*Requirements of VAT payers are not taken into consideration while determining VAT policy.	VAT payers	100	3	15	32	31	19	3.48	1.05
	VAT officers	100	15	41	30	12	2	2.45	0.95
	VAT experts	100	1	19	24	36	20	3.55	1.04
	Bus. community	100	-	10	24	42	24	3.80	0.92
Overall response %		400	4.75	21.25	27.5	30.25	16.25	3.32	1.02
* The Government policy is not clear regarding monitoring of VAT.	VAT payers	100	-	9	23	47	21	3.80	0.87
	VAT officers	100	19	47	22	9	3	2.30	0.97
	VAT experts	100	5	8	30	42	15	3.54	1.00
	Buss community	100	2	17	23	39	19	3.56	1.04
Overall response %		400	6.5	20.25	24.5	34.25	14.5	3.30	1.13
*Current VAT policy of the government covers all sectors applicable for VAT.	VAT payers	100	13	36	36	13	2	2.55	0.94
	VAT officers	100	12	37	25	24	2	2.67	1.03
	VAT experts	100	16	38	30	14	2	2.48	0.98
	Bus. community	100	7	44	23	19	7	2.75	1.06
Overall response %		400	12.0	38.75	28.5	17.5	3.25	2.61	1.01

Statements	Respondents	No. of Respondents	percentage distribution of respondents					Scores	
			Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	Mean	Standard deviation
*Government has policy to support and promote corporate businesses.	VAT payers	100	5	26	43	22	4	2.94	0.91
	VAT officers	100	9	21	27	40	3	3.07	1.04
	VAT experts	100	12	35	18	30	5	2.81	1.14
	Bus. community	100	17	26	27	26	4	2.74	1.14
Overall response %		400	10.75	27.00	28.75	29.5	4.00	2.89	1.07
*VAT registration is easy for business enterprises.	VAT payers	100	-	-	-	-	-	--	--
	VAT officers	100	-	3	5	39	53	4.42	0.72
	VAT experts	100	-	3	5	39	53	4.42	0.72
	Bus. community	100	1	6	15	42	36	4.06	0.91
Overall response %		400	0.33	4.00	8.34	40.00	47.33	4.30	0.81
*VAT cancellation is also easy for business enterprises.	VAT payers	100	-	-	-	-	-	--	--
	VAT officers	100	4	15	21	35	25	3.62	1.13
	VAT experts	100	41	44	10	5	-	1.79	0.82
	Bus. community	100	47	41	8	2	2	1.71	0.85
Overall response %		400	30.66	33.33	13.00	14.00	9.00	2.37	1.29
* VAT is exempted for agriculture inputs like fertilizers, seeds, etc.	VAT payers	100	-	2	9	48	41	4.28	0.71
	VAT Adm.	100	3	1	4	31	61	4.46	0.86
	VAT experts	100	-	-	6	70	24	4.18	0.51
	Business com.	100	-	1	12	48	39	4.25	0.70
Overall response %		400	0.75	1.00	7.75	49.25	41.25	4.29	0.71
Total response average		400	7.65	19.5	23.35	32.00	17.5	3.61	0.52

Source: Field survey, 2025,

It can clearly be seen from Table: 3 that the majority of VAT payers (82%), VAT officers (94%), VAT experts (80%) and business community members (56%) support the statement that “VAT policy of the government is satisfactory” with their respective mean score of 3.26, 3.72 and 3.14 and 2.64 and standard deviation of 0.87, 0.79, 0.89 and 0.94. Similarly, the majority of respondents (72%) show positive to the statement with mean score of 3.62 and standard deviation of 0.95.

It is also apparent from the table (Table 6.3) that the majority of VAT payers (88%), VAT officers (86%), VAT experts (93%), and business community members (76%) positively agree to the issue on “The VAT system will raise more revenue” with their respective mean scores of 3.63, 3.74, 3.84 and 3.27 and standard deviation of 0.84, 1.01, 0.87 and 1.13. The majority of all the respondents (73.25%) also affirmatively

expressed their view on the statement with the mean value of 3.62, standard deviation of 0.99.

Similarly, Table 6.3 reveals that the majority of VAT payers (76%), VAT officers (53%), VAT experts (77%) and business community members (87%) are found with agreement with the statement that “Government policy is big challenges for payers and business communities” with their respective mean scores of 3.34, 2.57, 3.31 and 3.62 and standard deviations of 0.91, 0.90, 0.97 and 1.01. By the same fashion, the majority of overall respondents (72.25%) of the four groups are also positive to the statement with aggregate mean score of 3.21 and standard deviation of 1.02.

This is also to note that the majority of VAT payers (82%), VAT experts (80%) and business community members (90%) are in favor of the statement that “Requirements of VAT payers are not taken into consideration while determining VAT policy”. Their respective mean scores are

3.48, 3.55 and 3.80; and standard deviation of 1.05, 1.04 and 0.92, significant at 99% confidence level. On the contrary, the majority (56%) VAT officers are arguing to the statement with mean scores of 2.45 and standard deviation of 0.95. The majority (74%) of overall respondents, nonetheless, are found affirmative to the statement with a mean score of 3.32 and standard deviation of 1.02.

This is also interesting to reckon with that the majority of VAT payers (91%), VAT experts (87%) and business community members (81%) are considered to be positive to the statement “The government policy is not clear regarding monitoring of VAT”. The respective mean scores are 3.80, 3.54 and 3.56; and standard deviations of 0.87, 1.00 and 1.04. On the other hand, the majority (66%) VAT officers are not affirmative to the statement with the mean scores of 2.30 and standard deviation of 0.97. The majority (73.25%) of all respondents from the 4 groups, however, are affirmatively supported the statement with a mean score of 3.30 and standard deviation of 1.13.

As per Table 3, among the four groups of respondents, two groups, *viz.*, VAT payers and VAT officers, however, support the statement “Current VAT policy of the government covers all the VAT applicable sectors” with a thin majority 51%. The respective mean scores of the responses of the two groups are 2.55 and 2.67, with standard deviations of 0.94 and 1.03. While the thin majority of other two groups, *viz.*, VAT experts (54%) and business community members (51%) could not support the statement with their respective mean scores 2.48 and 2.75, and standard deviations of 0.98 and 1.06. The overall response of the four groups of respondents indicates that a very thin majority (50.75%) does

not subscribe to the statement with the aggregate mean score 2.61 and standard deviation of 1.01.

Table 3 also clearly shows that the majority of VAT payers (69%), VAT officers (70%) VAT experts (53%) and respondents from the business community (57%) are in favor of the statement “Government has policy to support and promote business enterprises” with their respective mean score of 2.94, 3.07, 2.81 and 2.74 and standard deviations of 0.91, 1.04, 1.14 and 1.14. In sum, the majority (62.25%) of all the respondents are in favor of the statement with the aggregate mean score of 2.89 and standard deviation of 1.07.

Since the statement “VAT registration is easy for business enterprises” was not relevant to the ultimate VAT payers, the statement was not put forth to them. However, the other three groups of respondents recorded their ratings on this statement. As is evident from the above table majority of VAT officers (97%), VAT experts (97%) and business community members (91%) show absolutely positive towards the statement.

“VAT cancellation is easy for business enterprises” was irrelevant to VAT payers and therefore, the statement was not put forth to them. However, as is apparent from Table 3 the other three groups of respondents rated the scale, among them a great majority of VAT officers (81%) agreed positively to that statement with the mean score of 3.62 and standard deviation of 1.13, significant at 99% confidence level. However, the other two groups, *viz.*, VAT experts and business community members did not go with the statement. A great majority of VAT experts (85%) and business community respondents (88%) felt disagreement to the statement with their respective mean score of 1.79 and 1.71 and standard deviation of 0.82 and 0.85. The majority of respondents of the three

groups together (64%) indicate that they are not subscribing the statement with the aggregate mean score of 2.37 and the standard deviation of 1.29. The above table (Table 6.3) evidently shows that almost all respondents, 98.25%, agree with the statement “Agriculture inputs like fertilizer and seeds are VAT exempted” with the aggregate mean score of 4.29, standard deviation of 0.71.

Summary of Various statements under the ‘Value Added tax compliance for VAT collection

The summary table (Table: 4) computed from the composite score of the various statements related

to the issue of VAT compliance indicates the presence of the opinion in the various levels of agreement on the issue. The legal provisions are reported complex and not easy to understand. The overwhelming majority of respondents from all the groups agree with the problem in understanding legal provisions. All the respondents fall in agree scale of response. It means there is a consensus in viewing the legal provisions by the respondents.

Table: 4
Percentage distribution of respondents on the summary of ‘VAT compliance for VAT collection by the types of respondents and scale of responses.

Factors	Respondents	No. of respondents	Percentage distribution of respondents					Scores	
			Strongly disagreed	Disagree	Slightly agree	Agree	Strongly agree	Mean	Standard deviation
*VAT compliance	VAT payers	100	0	0	18	78	4	3.86	0.44
	VAT Adm.	100	0	0	28	71	1	3.73	0.46
	VAT experts	100	0	0	19	78	3	3.84	0.44
	Business com.	100	0	0	27	71	2	3.75	0.47
Overall response		100	0	0	23.00	74.5	2.5	3.61	0.52

Source: Field Survey, 2025

As can be seen from the above table, that all the respondents come under various scales of agreement. The overwhelming majority of them 74.5% “agree”. Similar has been the strata wise pattern of responses of all the respondents. Since the composite mean score of responses is 3.61, it indicates that all the respondents share the similar view on the presence of complexity in understanding VAT compliance provisions relating to VAT.

It is worthwhile to see as Ranking of the issues

Which order of 6 different issues pertaining to the administrative efficiency and effectiveness, the four groups of respondents expressed their agreement? On the basis of the composite percentage distribution of the responses on six different issues relating to the rate, administrative efficiency, VAT compliance for VAT collection,

incentive for VAT collection, evasion and effectiveness of VAT, an attempt has been made to rank them in order of agreement among different groups of respondents. The composite

percentage distribution of responses on five-point scale, their means, standard deviations and ranks are presented in Table 5

Table: 5
Percentage distribution of respondents on the summary of ‘all the statement’ by the types of respondents and scale of responses

Issues	No. of respondents	Percentage distribution of respondents					Score		
		Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	Mean	Standard deviation	Rank
VAT rate	400	-	6.75	66.25	26.75	0.25	3.20	0.55	6
Administrative efficiency	400	-	0.25	24.75	69.00	6.00	3.80	0.53	3
VAT compliance	400	-	-	23.00	74.50	2.50	3.61	0.52	4
Evasion of VAT	400	-	0.50	32.50	52.25	14.75	3.81	0.67	2
Effectiveness of VAT	400	-	2.25	43.75	49.00	5.00	3.56	0.62	5
VAT incentives	400	-	1.00	30.25	60.5	8.25	3.85	0.62	1

Source: Field survey, 2025

From Table 5., it can be observed that ‘incentives for VAT collection’ stands one in the rank order of agreement (99%) among all the four groups of respondents with 3.85 mean score. This suggests that incentives to tax payers, business community and VAT officers for efficient and effective implementation of VAT in the country. Similarly, ‘evasion of VAT’ ranks second in order of agreement (99.5%) among the respondents of all strata, with mean score of 3.81. That indicates evasion of VAT is a common practice in the country. In the third rank order of agreement (99.75%) is ‘administrative efficiency’ with 3.8 mean score, which implies that administrative efficiency for VAT collection needs be ensured by making policy and procedure more simple, easy and transparent. ‘Legal provisions’ relating to VAT stands fourth in the rank order of agreement (100%) among all the groups of respondents with mean score of 3.61, suggesting that rules and regulations of VAT need to be clear and favorable to VAT payers, business community and VAT administration. In the 5th rank order of the agreement (97.75%) of all the

groups of respondents is ‘VAT effectiveness’ with mean score of 3.56 indicates that VAT promotes economic growth through remittance, consumption, savings and investment. The lowest in the rank order of agreement (93.25%) is ‘VAT rate’ with mean score of 3.20, which implies that the VAT rate seems to be satisfactory and equitable.

Analysis of relationship between VAT compliance and VAT evasion

The matrix of VAT evasion and legal provision affect evasion of VAT. The cross tabulation has been computed from the frequency and percentage distribution of respondents in each of the cells of 5-point scale. This process is used to obtain the extent of explanation of VAT evasion with respect to legal provision. Table 6.18 is a matrix of responses of respondents on VAT evasion and legal provision. It shows the relative status and relationship between VAT evasion and legal provision showing frequencies of

respondents and the percentage of total respondents.

H_1 : There is association between VAT compliance and VAT evasion

Note: The foregone table is computed from the cross tabulation of five-point scale (one for

strongly disagree and 5 for strongly agree) obtained from the total score of various statements under VAT evasion and the score of issue regarding VAT compliance. The VAT evasion being dependent variable. A Gamma (γ) test statistic is computed to show the extent of relationship and its level of significance

Table: 6
Relationship of legal provision with VAT evasion

Scale of response		Tax compliance					Total
		Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	
VAT evasion	Strongly disagree	0 [0%]	0 [0%]	0 [0%]	0 [0%]	0 [0%]	0 [0%]
	Disagree	0 [0%]	0 [0%]	2 [0.5%]	0 [0%]	0 [0%]	2 [0.5%]
	Slightly agree	0 [0%]	0 [0%]	55 [13.75%]	73 [18.25%]	2 [0.5%]	130 [32.50%]
	Agree	0 [0%]	2 [0.5%]	80 [20%]	126 [31.5%]	1 [0.25%]	209 [52.25%]
	Strongly agree	0 [0%]	0 [0%]	21 [5.25%]	35 [8.75%]	3 [0.75%]	59 [14.75%]
	Total	0 [0%]	2 [0.5%]	158 [39.5%]	234 [58.5%]	6 [1.5%]	400 [100%]

Gamma (γ): (0.104)***

Source: Field survey, 2025

The cross tabulation provides that the highest frequency of respondents forms with agree for VAT evasion and for legal provision. It is 126 (31.5%) of total respondents. However the majority of the respondents fall in degree of 'agree' scale in both the issues viz. VAT evasion and legal provision, which meaning that VAT evasion and legal provision have no relationship. In other words, the stricter the legal provisions lower the VAT evasion.

Combining the responses 'slightly agree', 'agree' and 'strongly agree', who responded on

VAT evasion forms a 98% of total respondents and the same group of respondents who consider legal provision as a reason for VAT evasion form 98%. It implies that the largest group of respondents perceive legal provisions as a reason for VAT evasion. In the processing of 5-point scale matrix of 'VAT evasion' and 'legal provision', the Gamma value obtained is 0.104 which is significant at 10% level, which rejects the null hypothesis. It can thus be deduced that VAT evasion is affected by legal provisions.

Analysis of the relationship between Legal provisions and perceived VAT effect

The matrix of perceived VAT effect and legal provision is prepared with the cross tabulation of level of response of perceived VAT effect and legal provisions in 5-point scale. This process is used to obtain the extent of explanation of VAT effect as a result of legal provisions. Table 6.21 is a matrix of responses of respondents on VAT effectiveness and legal provisions. It shows the relative status and relationship between VAT effect and legal provision showing percentage distribution of the respondents.

Note: The above table is computed from the cross tabulation of five-point scale (one for strongly disagree and 5 for strongly agree) obtained from the total score of various statements under VAT evasion and the score of statements regarding legal provision. The VAT evasion being dependent variable and VAT effectiveness independent variable, a Gamma (γ) test statistic is computed to show the extent of relationship and its level of significance.

H₁: There is association between VAT legal provisions and VAT effectiveness'

Table: 7
Relationship of VAT effectiveness with VAT compliance

Scale of response		Legal provisions					Total
		Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	
VAT Effectiveness	Strongly disagree	0 [0%]	0 [0%]	0 [0%]	0 [0%]	0 [0%]	0 [0%]
	Disagree	0 [0%]	0 [0%]	2 [0.5%]	6 [1.5%]	1 [0.25%]	9 [2.25%]
	Slightly agree	0 [0%]	2 [0.5%]	84 [21%]	87 [21.75%]	5 [1.25%]	178 [44.5%]
	Agree	0 [0%]	0 [0%]	63 [15.75%]	128 [32%]	2 [0.5%]	193 [48.25%]
	Strongly agree	0 [0%]	0 [0%]	7 [1.75%]	12 [3%]	1 [0.25%]	20 [5%]
	Total	0 [0%]	2 [0.5%]	156 [39%]	233 [58.25%]	9 [2.25%]	400 [100%]

Gamma(γ): (0.182)*

Source: Field survey, 2018

The cross tabulation provides that the frequency of both VAT effectiveness issue and legal provisions fall at higher level of positive response 'slightly agree' and 'agree' scales match with the pair of agreement. While the percentage of the respondents who do not agree with VAT effectiveness and also do not agree with legal provision i.e. 0.5% and 2.25% respectively. By combining the responses of respondents in three scales of 'slightly agree', 'agree' and 'strongly agree' who responded on effectiveness of VAT a

99.5% of total respondents and the same group of respondents who consider legal provisions as a reason for VAT effectiveness form 97.75%, which means that largest group of the respondents perceive legal provision as a reason for VAT effectiveness. While, testing the null hypothesis that there is no association between 'VAT effectiveness' and 'legal provisions, the computed value of Gamma is 0.182 significant at 5% level and therefore, the null hypothesis is not

accepted, implying that VAT effectiveness is affected by the issue legal provisions.

Perceived VAT Compliance for VAT collection

As, in the case of perceived VAT compliance for VAT collection multiple regression analysis has been used to identify the factors affecting VAT compliance for VAT collection. For the analysis, VAT Compliance for VAT collection (VCVAT) is taken as dependent variable, whereas VAT effectiveness VAT rate complication (VRC), administrative efficiency (AdmE) and incentive for VAT collection (IVC) are employed as independent variables.

It is assumed that VAT rate complication has negative relationship with VAT effectiveness,

$$\text{VCVAT} = \beta_0 + \beta_1 \text{VRC} + \beta_2 \text{VE} + \beta_3 \text{AdmE} + \beta_4 \text{IVC} + \dots + e_i$$

meaning that VAT rate complications lead to ineffective VAT collection. Similarly, indicating that increase in complexity on VAT compliance legal provisions leads to decrease in VAT effectiveness. Similarly, other factor being constant, administration efficiency leads to decrease in effective VAT collection. It is expected that administrative efficiency and VAT compliance has negative and significant relation with VAT compliance for VAT collection and VAT compliance for collection have negative and significant relationship, and VAT incentive for collection (VIC) has also been predicted to have negative relationship, implying that increase in VAT incentive will increase in VAT collection. A multiple regression model has been used and the results are presented in Table 6.23

Table: 8
 Regression result of VAT compliance for VAT collection

VCVAT = 24.7624*	-0.0936VRC	-0.12151 EV	-0.1756**AdmE	+ 0.0937VIC	+e _i
[7.4532]	[0.098735]	[0.16752]	[0.7789055]	[0.05689]	
{2,999872}	{-2.5674}	{-1.678452}	{3.23456013}	{1.234010}	
Obs; 400	F – (4,395): 19.4532*		Adj R ² : 0.37912		
Df; 395			Durbin Watson d test: 1.9321		
Normality test: J-B stat: 09.073					
Multicollinearity test:					
	<u>Variables</u>	<u>VIF</u>			
	VAT rate complication	1.4532			
	VAT effectiveness	1.9674			
	Administrative efficiency	1.0567			
	VAT incentives for VAT collection	1.3462			

Figures in parentheses [], { } indicates standard error and t-statistics of the concerned variables and p-values

(*) Significant at (0.01) 1% level

(**) Significant at (0.05) 5% level

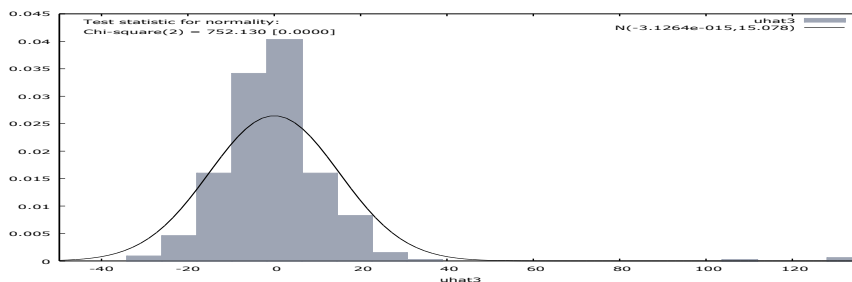
(***) Significant at (0.10) 10% level

The results of the regression model shows that the expected sign of the variable included in the model as per priory expectation. VAT rate

complication and VAT effectiveness and administrative efficiency negatively related, while incentive for VAT collection are positively

related with VAT compliance for VAT collection. The computed F-statistic is also higher than table value at 95% level of significance.

Durbin Watson test: The Durbin-Watson statistic is between 0 and 4 scale. DW test-statistics is 1.9321 and p-value is $0.000 < 0.05$ significant at 1% level. Therefore, the null hypothesis is accepted, meaning that residuals are not auto correlated.



Normality test: The *Jarque– Bera test* shows that the JB statistic is about 0.9073 and the probability of obtaining such a statistic under the normality assumption is about $0.000 < 0.01$ significant at 1%. **Null hypothesis: residuals are not normally distributed.** Therefore, the null hypothesis has been rejected and alternative hypothesis accepted, implying that the error terms are distributed normally.

Multicollinearity test: Null hypothesis: explanatory variables are not correlated. As can be seen in Table 8, the VIF for the predictor tells us that the variance of the estimated coefficient of *Weight* is not inflated by a factor of VIF because $VIF < 10$. So, the null hypothesis is accepted meaning that explanatory variables are not collated or the model has no multicollinearity problem. All independent variables are regressed with the dependent variable VAT collection effectiveness (VE). Analyzing the coefficient of all independent variables in the model, the statues of hypothesis appear as follows.

H₁: There is significant negative relationship between perceived VAT rate complication and the perceived VAT compliance for VAT collection.

The coefficient of VRC is 0.0936, meaning that the change in 1% on VAT rate will increase in

VAT compliance by 9.36 percent point. The regression model shows that the t-statistic 1.135 and p-value $0.2569 > 0.05$ not significant at 5%. Therefore, the null hypothesis is accepted, indicating that VAT rate complication has no significant impact on VAT compliance for VAT collection

H₂: There is significant negative relationship between perceived VAT compliance and the perceived effectiveness for VAT collection.

The coefficient of Effectiveness of VAT is -0.12151 , which implies that the change in 1% on effectiveness VAT will lead to change 12.151 percent point change on VAT Compliance for VAT collection. The regression model shows that the t-statistic is 1.246 and p-value $0.2135 > 0.05$, not significant at 5% level. Therefore, null hypothesis is accepted, meaning

that VAT effectiveness have no significant impact on VAT Compliance for VAT collection.

H₃: There is significant positive relationship between perceived administrative efficiency and the perceived VAT compliance for VAT collection.

The coefficient of administrative efficiency VAT on VAT compliance is 0.1756 meaning that the change in 1% on administrative efficiency will lead to change 0.1756 percent point change on VAT Compliance for VAT collection. The regression model shows that the t-statistic is 2.156 and p-value $0.0317 < 0.05$ significant at 5% level. The null hypothesis is thus rejected and alternative hypothesis is accepted, implying that administrative efficiency has significant impact on VAT compliance for VAT collection.

H₄: There is significant negative relationship between perceived VAT incentives and the perceived VAT compliance for VAT collection.

The coefficient of VAT incentives on VAT compliance is - 0.0937, which means that the change in 1% on VAT incentives leads to change -9.37% percent point on VAT compliance for VAT collection . The regression model shows that the t-statistic is 1.574 and p-value $0.1162 > 0.05$ not significant at 5% level. The null hypothesis is accepted, indicating that VAT incentives have significant negative impact on VAT compliance for VAT collection.

Major Findings

- The questionnaire survey conducted with VAT payers, VAT administration, VAT experts and business communities does not provide unanimous views on the issue of VAT compliance for VAT collection. This is also confirmed by the computed chi-square test.
- From the average view of the respondents on each statement related to VAT compliance for VAT collection, most of the respondents from VAT payers, VAT administration, VAT experts and VAT business community observe with “agree” scale. This indicates that mostly the respondents consented with the statement under issue of VAT compliance for VAT collection.
- The Gamma statistic from the cross tabulation has showed that there is a relationship of ‘administrative efficiency’ VAT evasion’ with ‘VAT rate’, ‘VAT compliance, and ‘VAT incentives’.
- The results of the regression model shows that the expected sign of the variable included in the model as per priory expectation. VAT rate complication and VAT effectiveness and administrative efficiency negatively related, while incentive for VAT collection are positively related with VAT compliance for VAT collection. The computed F-statistic is also higher than table value at 95% level of significance.
- The coefficient of VRC is 0.0936, meaning that the change in 1% on VAT

rate will increase in VAT compliance by 9.36 percent point. The regression model shows that the t-statistic 1.135 and p-value $0.2569 > 0.05$ not significant at 5%. Therefore, the null hypothesis is accepted, indicating that VAT rate complication has no significant impact on VAT compliance for VAT collection

Conclusion

- The various statements related to the issue of VAT compliance for VAT

collection shows an agreement of the respondents in the issues raised under VAT compliance. The respondents of all the strata provide common views of poor administration capability in handling VAT related affairs, as the composite mean score is higher than three (3.90) indicating their agreement with the statements identified for their response. The trend of VAT revenue collection is increasing throughout the study period.

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