



## Perceived status of Administrative efficiency on Value Added Tax (VAT) in Nepal

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### ABSTRACT

*This research determinations to consider the perceived administrative efficiency of the Value added tax (VAT) in Nepal. The specific objectives are: analysis of the perceived administrative efficiency of VAT collection and current status of VAT of Government of Nepal. The study follows descriptive and explanatory research designs to explore the administrative efficiency 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 administrative efficiency 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  $R^2 : 0.391$ . 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 39% by the variables of independent variables included in the model*

**Key words:** Administrative efficiency, VAT collection, Evasion, Legal provisions

### Introduction

Nepal has made great strides over the past decades in putting in place a modern tax system. Preparations for a VAT were initiated in 1993, and adapted of the VAT from 1997. Today, the VAT generates almost one third of revenue to the government's tax revenue (Economic Survey 2018). The VAT organization is structured along functional lines. Sections and sub-sections are created for each function. Large taxpayer, tax refund, taxpayer service tax audit and investigation, internal monitoring, collections and registration are important sections. The duties of each unit and job description of each position in this organization are spelt out clearly. Under the functional structure, a tax officer is made responsible to carry out a specific job like registration, collection, refund or audit. The inherent idea is to allow any tax officer to meet his/her career aspirations and interests and to nurture specialist in the area of tax administration. Evolution of corruption-free system is considered as a precondition for an efficient and transparent tax administration.

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.

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 effectiveness of VAT depends on the VAT accounting system. It should neither contain unnecessary details nor is inadequate so that it cannot provide appropriate and useful information. The VAT accounting should be information-based as well as less costly. The accounting in VAT consists in the process of maintaining purchase, sales book, VAT account and stock. Thus Purchase and Sales books are the main part of VAT accounting. The Purchase book contains such information as TPIN, the supplier's name with TPIN, The customer's name with TPIN. Previously hotel tax, sales tax, contract tax and entertainment tax were administered by separate Acts. In 1995, VAT was introduced in Nepal, it replaced other acts and all taxes were incorporated under VAT Act. It is proved experience that VAT is a scientific and modern tax system. It is assumed that it is broad based that has higher enforcement capacity and higher deepening power. But in Nepal, the implementation experiences are not so very strong. Policy inconsistency and frequently change in laws is one of the remarkable shortcoming. Revenue leakage has not been controlled as desired. The mechanism is not functioning properly. The weaknesses, by experience, can be listed as (Adhikari, 2010). Since a good tax policy cannot come about without good tax administration in the country. Therefore a question was asked to all the categories of respondents related to this issue. This study expects negative relation on evasion on VAT administration and positive relation to measure the effectiveness of VAT from the opinion survey.

Since a good tax policy cannot come about without good tax administration, it is necessary to adopt reform measure is the tax administration. Taxes are levied in Nepal in some form or another since time immemorial, and therefore some method of tax administration has always been in place. Land revenue, customs and excise duties have been the traditional instruments of taxation. In Nepal, during the past decades or so, some efforts have been made to reform the tax administration. A closed revenue group was

created in 1992/93. Similarly, a VAT administration was created along functional lines in 1996, and in order to avoid duplications and overlapping of functions. The VAT and income tax administration were merged in 2001, resulting in the creation of the Inland Revenue Department under the Ministry of Finance. The VAT administration, from its inception onwards, was fully computerized in order to establish database an information-based tax system. This is being replicated in Government in the other branches of the Tax administration. In 2004, the government also opened a large tax payer office in order to provide better service and monitor large tax payers. As the modern tax administration demands professionalism with expertise in the tax system, accounting, auditing, law, economics, and information technology, it is necessary to create an appropriate working environment that should include, amongst other things, high pays, so that competent professionals can be attracted and retained in the tax administration. It is equally important to establish a performance based evaluation system, and an effective reward and punishment. It is necessary to institutionalize the training in the tax administration. As some tax officials lack specialized training, they should be given comprehensive training on various aspects of taxation in a phase-wise manner.

## Literature review

Effectiveness of tax administration also contributes to the wide variation in the VAT revenue performance it is important to bear in mind, however, that the diversity of developing countries is reflected in how the VAT is administered (Casangra, 2002). The efficiency can be considered as ability of government to collect taxes with low costs (Jantscher, 2002). This requires the effective implementation of policies, laws and programmes. Strong monitoring mechanisms, active citizen participation, convergence of Government institutions and programmes and capacity building of service delivery personnel can help the delivery of pro-poor services. Since a good tax policy cannot come about without good tax administration, it is necessary to adopt reform measure is the tax administration. Taxes are levied in Nepal in some form or another since time immemorial, and therefore some method of tax administration has always been in place. Land revenue, customs and excise duties have been the traditional instruments of taxation. In Nepal, during the past decades or so, some efforts have been made to reform the tax administration. A closed revenue group was created in 1992/93. Similarly, a VAT administration was created along functional lines in 1996, and in order to avoid duplications and overlapping of functions. The VAT and income tax administration were merged in 2001, resulting in the creation of the Inland Revenue Department under the Ministry of Finance. The VAT administration, from its inception onwards, was fully computerized in order to establish database an information-based tax system. This is being replicated in Government in the other branches of the Tax administration. In 2004, the government also opened a large tax payer office in order to provide better service and monitor large tax payers. As the modern tax administration demands professionalism with expertise in the tax system, accounting, auditing, law, economics, and information technology, it is necessary to create an appropriate working environment that should include, amongst other things, high pays, so that competent professionals can be attracted and retained in the tax administration. It is equally important to establish a performance based evaluation system, and an effective reward and punishment. It is necessary to institutionalize the training in the tax administration. As some tax officials lack specialized training, they should be given comprehensive training on various aspects of taxation in a phase-wise manner.

Nepal has made great strides over the past decades in putting in place a modern tax system. Preparations for a VAT were initiated in 1993, and adapted of the VAT from 1997. Today, the VAT generates almost one third of revenue to the government's tax revenue (Economic Survey 2018). The VAT organization is structured along functional lines. Sections and sub-sections are created for each function. Large taxpayer, tax refund, taxpayer service tax audit and investigation, internal monitoring, collections and registration are important sections. The duties of each unit and job description of each position in this organization are spelt out clearly. Under the functional structure, a tax officer is made responsible to carry out a specific job like registration, collection, refund or audit. The inherent idea is to allow any tax officer to meet his/her career aspirations and interests and to nurture specialist in the area of tax administration. Evolution

of corruption-free system is considered as a precondition for an efficient and transparent tax administration.

### Research methodology

The study has attempted to examine the perceived administrative efficiency and relationship between impact of effectiveness of value added tax (VAT) descriptive and explanatory research design has been applied. VAT rate complication, legal provision, 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 520 structured questionnaires were distributed but 400 have been responded analyzed to measure the effectiveness of administrative efficiency of VAT. 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.

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

P = Assuming probability of occurring p is 0.50 (for P unknown, the maximum value of the product p x 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 effectiveness administrative efficiency 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.

**Model Specification Model:** Perceived administrative efficiency for VAT collection as a dependent variable A multiple regression analysis is used to identify the factors affecting administrative efficiency. For the analysis, administrative efficiency in VAT collection (AdmE) is taken as dependent variable whereas it is argued that VAT rate complication (VRC), complex legal provision (CLP), 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 effectiveness administrative efficiency for VAT collection, descriptive and explanatory research design has been applied. VAT rate complication, legal provision, VAT evasion, VAT efficiency, and leakages of VAT effect are examined.

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

Where, AdmE represents administrative efficiency for VAT collection,  
 EVC represents evasion for VAT collection  
 VRC represents VAT rate complication  
 CLP represents complex legal provision  
 IVC represents Incentives for VAT collection

## Result and Discussion

Effectiveness of tax administration also contributes to the wide variation in the VAT revenue performance it is important to bear in mind, however, that the diversity of developing countries is reflected in how the VAT is administered. The efficiency can be considered as ability of government to collect taxes with low costs. This requires the effective implementation of policies, laws and programmes. Strong monitoring mechanisms, active citizen participation, convergence of Government institutions and programmes and capacity building of service delivery personnel can help the delivery of pro-poor services. This study has attempted to examine the issue as to how effective and efficient the government has been in implementing VAT since its inception. Therefore, the respondents were asked to rate 10 statements relating to administrative effectiveness and efficiency of VAT on the five-point Likert scale.

**Table: 1**  
**Percentage distribution of respondents, in scale of response on various statements under the issue of ‘administrative efficiency’ for VAT collection.**

Statement	Respondents	No. of Respondents	percentage distribution of respondents					Scores	
			Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	Mean	Standard deviation
*VAT declaration process is simple and easy.	VAT payers	100	4	30	41	23	2	2.89	0.87
	VAT officers	100	-	3	20	45	32	4.06	0.80
	VAT experts	100	15	25	30	27	3	2.78	1.09
	Bus. Comm	100	15	43	28	12	2	2.43	0.95
Overall response		400	8.5	25.25	29.75	26.75	9.75	2.99	3.04
*VAT collection process is easy and effective.	VAT payers	100	8	39	29	22	2	2.71	0.96
	VAT officers	100	2	2	22	46	28	3.96	0.87
	VAT experts	100	13	23	31	32	1	2.85	1.04
	Business com.	100	17	33	25	24	1	2.59	1.06
Overall response		400	10	24.25	26.75	31	8	3.02	1.12
*Government can collect all the collectable VAT.	VAT payers	100	19	43	13	21	4	2.48	1.14
	VAT officers	100	6	36	22	33	3	2.91	1.02
	VAT experts	100	16	42	18	15	9	2.59	1.18
	Bus. Com.	100	16	28	29	20	7	2.74	1.16
Overall response		400	14.25	37.25	20.5	22.25	5.75	2.68	1.13
*Administrative cost of collecting VAT is comparatively higher than other taxes.	VAT payers	100	6	28	26	34	6	3.06	1.05
	VAT officers	100	16	46	23	10	5	2.42	1.03
	VAT experts	100	3	33	24	24	16	3.17	1.14
	Bus. Community	100	4	18	35	30	13	3.30	1.03
Overall response %		400	7.25	31.25	27.0	24.5	10	2.98	1.06
*VAT administration is lacking the resources for effective collection of VAT revenue on time.	VAT payers	100	2	11	30	40	17	3.59	0.96
	VAT officers	100	7	32	27	28	6	3.07	1.06
	VAT experts	100	3	13	26	46	12	3.51	0.96
	Bus. Community	100	10	17	28	32	13	3.21	1.17
Overall response		400	5.5	18.25	27.75	36.5	12	3.34	1.07
*Administration is facing difficulties due to improper invoicing and recordkeeping	VAT payers	100	2	8	23	48	19	3.74	0.97
	VAT officers	100	-	5	25	44	26	3.91	0.84
	VAT experts	100	-	6	18	50	26	3.96	0.82
	Bus. Community	100	11	26	16	35	12	3.11	1.23
Overall response		400	3.25	11.25	20.5	44.25	20.75	3.68	1.02
*Since most of the consumers do not collect VAT bill	VAT payers	100		5	16	49	30	4.04	0.81
	VAT officers	100	2	2	6	43	47	4.31	0.83
	VAT experts	100	1	9	8	42	40	4.11	0.92
	Bus. Community	100	2	17	16	38	27	3.71	1.10
Overall response		400	1.25	8.25	11.5	43.0	36.0	4.04	0.95
*VAT structure/ policy have failed to recognize all VAT payers	VAT payers	100	1	3	18	56	22	3.95	0.78
	VAT officers	100	10	29	32	24	5	2.85	1.05
	VAT experts	100	3	11	25	40	21	3.65	1.02
	Bus. Community	100	4	15	44	17	20	3.61	1.09
Overall response		400	4.5	14.5	29.75	34.25	17.0	3.51	1.07
*Political interference	VAT payers	100	2	7	16	50	25	3.89	0.93

Statement	Respondents	No. of Respondents	percentage distribution of respondents					Scores	
			Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	Mean	Standard deviation
affects VAT revenue collection.	VAT officers	100	17	26	31	20	6	2.72	1.14
	VAT experts	100	2	16	27	36	19	3.54	1.03
	Bus. Community	100	3	15	24	44	14	3.51	1.01
Overall response		400	6.0	16.0	24.5	37.5	16	3.41	1.11
*The administration of VAT refund on input/purchase is an unresolved issue in Nepal.	VAT payers	100	-	7	30	47	16	3.72	0.81
	VAT officers	100	16	30	31	20	3	2.64	1.06
	VAT experts	100	1	13	24	40	22	3.69	0.99
	Bus. Community	100	1	10	20	42	27	3.84	0.97
Overall response		400	4.5	15.0	26.25	37.25	17.0	3.47	1.07
Total grand average response		400	6.45	20.12	24.5	33.75	15.18	3.80	0.53

Source: Field survey 2025

It is apparent from the above table:1 that the majority of VAT payers (66%), VAT officers (97%), and VAT experts (85%) have agreed with the statement “VAT declaration process is easy and effective”, with their respective mean scores of 2.89, 4.06 and 2.78., and standard deviations of 0.87, 0.80 and 1.09. However, the respondents from business community did not agree with the opinions of other respondents. The overall response in this statement is positive and considers simple and easy process. From this it can be deduced that “VAT declaration process is somewhat simple and easy” in Nepal.

Similarly, it also shows that majority of the VAT payers (53%), VAT officers (98%) and VAT experts (64%) believe that the statement “VAT collection process is easy and effective” is right with their respective mean values of 2.71, 3.96 and 2.85 and standard deviations of 0.96, 0.87 and 1.04. However, the aggregate responses of all the four groups of respondents indicate that the majority (65.75%) of them are positive to the statement with the aggregate mean score of 3.02, standard deviation of 1.12.

Regarding VAT collection by the government, majority of the respondents consider that government should collect VAT. However, there is no consensus in this issue. A majority of VAT officers (58%) and respondents from the business community ((56%) believe that the “Government can collect all the collectable VAT”. It captures the mean scores of 2.91 and 2.74 and standard deviations of 1.02 and 1.16 at 99% level of significance. On the other hand, the majority of VAT payers (62%) and VAT experts ((58%) expressed negatively to the statement “Government can collect all the collectable VAT” with their respective mean scores of 2.48 and 2.59 and standard deviations of 1.14 and 1.18 significant at 99% confidence level. However, the overall response of the four groups of respondents indicates that a simple majority (51.50%) of them do not believe that the “Government can collect all the collectable VAT with the aggregate mean score of 2.68 standard deviation of 1.13.

Regarding, “Administrative cost of collecting VAT is comparatively higher than that of the other taxes”. VAT payers (66%), VAT experts (84%) and respondents from the business community (78%) opined positively to the statement with their respective mean values of 3.06, 3.17 whereas most of the VAT officers (62%) are against the statement with mean score of 2.42. The overall **response** of the four groups of respondents, however, indicates that majority (61.50%) of all the respondents believed that “Administrative cost of collecting VAT is comparatively higher than that of the other taxes” with the aggregate mean score of 2.98 and standard deviation of 1.06.

Similarly, the majority of VAT payers (87%), VAT officers (61%), VAT experts (84%) and respondents from the business community (73%) consider lack of resources for VAT administration is lacking the resources for effective collection of VAT revenue on time” with their respective mean scores of 3.59, 3.07, 3.51 and 3.21 and standard deviations of 0.96, 1.06, 0.96 and 1.17 respectively. All the groups of respondents accept the fact that “VAT administration is lacking the resources for effective collection of VAT revenue on time” with the aggregate mean value of 3.34 with the standard deviation of 1.07. Regarding the improper invoicing, VAT payers (90%), VAT officers (95%), VAT experts (94%) and business community respondents (63%) accepted the fact that “Administration is facing difficulties due to

improper invoicing and record keeping by the business community” with their respective mean scores of 3.74, 3.91, 3.96 and 3.11, standard deviation of 0.97, 0.84, 0.82 and 1.23 respectively. Likewise, a majority (65.50%) of overall respondents positively consider their view on the statement with an aggregate mean score of 3.68 and the standard deviation of 1.02.

Regarding carelessness in collecting VAT bills, most of all the respondents of the group (95%) of VAT payers, (96%) of VAT officers, (90%) of VAT experts and (81%) of the business community members) and in aggregate (90.50%) admitted that “Since most of the buyers do not collect VAT bill, tax administration has to face problem in VAT collection” it is with aggregate mean value of 4.04 and standard deviation of 0.95.

All the VAT payers (96%), VAT officers (61%), VAT experts ((86%) and respondents from the business community (81%) agree with the statement that “VAT structure/policy has failed to recognize all VAT payers in Nepal” with their respective mean score of 3.95, 3.85, 3.65 and 3.61 and standard deviation of 0.78, 1.05, 1.02, and 1.09. Similarly, the majority (81%) of overall respondents from the four categories also accept that “VAT structure/policy has failed to recognize all VAT payers in Nepal” with the aggregate mean score of 3.51 with standard deviation of 1.07, at 99% level of significance.

Similarly, it can clearly be evident from the table that the majority of all the VAT payers (91%), VAT officers (67%), VAT experts ((81%) and respondents from the business community (83%) have agreed with the statement “Political interferences affect the VAT revenue collection”, with the mean scores of 3.89, 2.72, 3.54 and 3.51, and standard deviations of 0.93, 1.14, 1.03, and 1.01 respectively. Likewise, a majority (78%) of the total 400 respondents conceded the statement with the mean value of the total of 3.41 and the standard deviation of 1.11 at the 99% level of significance.

With respect to the administration of VAT refund, VAT payers (93%), VAT officers (54%), VAT experts (86%) and business community affirmatively expressed on the statement that “The administration of VAT refund on input/purchase is an unresolved issues in Nepal”. The mean scores of which, appear as 3.72, 2.64, 3.69 and 3.84, and standard deviations of 0.81, 1.06, 0.99 and 0.97 respectively. Similarly, the majority (80.50%) of overall respondents of the four groups positively supported the statement with the aggregate mean score of 3.47 and standard deviation of 1.07.

### Summary of various statements under the ‘Administrative efficiency’

The summary table computed from the composite score of the various statements related to the issue of administrative efficiency shows an agreement of the respondents in the issues raised under administrative efficiency. 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 (3.80) indicating their agreement with the statements identified for their response.

**Table: 2**  
**Percentage distribution of respondents on the summary of ‘administrative efficiency’ by the types of respondents and scale of responses.**

Factors	Respondents	No. of Respondents	Percentage distribution of respondents					Scores	
			Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	Mean	Standard deviation
*Administrative efficiency	VAT payers	100	0	0	18	72	10	3.92	0.52
	VAT Adm.	100	0	0	26	72	2	3.76	0.47
	VAT experts	100	0	0	17	76	7	3.90	0.48
	Business com.	100	0	1	38	56	5	3.65	0.59
Overall response		400	0	0.25	24.75	69.00	6.00	3.80	0.53

Source: Field Survey, 2025

The table also presents percentage distribution of the respondents by scale of response and types of respondents. The percentage of the respondents who do not agree with the problem statement is negligible as it constitutes only 0.25% (2). The rest of the respondents come under various scales of

agreement. The distribution of respondents mostly appears with the score of ‘agree’ is 69%, who believe that the administrative efficiency is a problem.

### Ranking of the issues

It is worthwhile to see as to 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, legal provisions, incentive for, 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: 3.

**Table: 3**  
**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
Legal provisions	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 (3), 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 5<sup>th</sup> 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 issue relating to Administrative efficiency and VAT evasion.

In order to see the relationship between issues of administrative efficiency and VAT evasion, a matrix has been prepared. The matrix of VAT evasion and administrative efficiency shows that administrative inefficiency as a reason for VAT evasion. The cross tabulation has been computed 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 administrative efficiency. Table: 4 is a matrix of responses of different four groups of respondents on VAT evasion and administrative efficiency. It shows the relative status and relationship between VAT evasion and administrative efficiency.

The cross tabulation provides that the largest frequency of respondents ‘agree’ for VAT evasion and for administrative efficiency. It is 159 (39.75%) of total respondents. However, many of the respondents fall at higher level of scale indicating administrative efficiency as a factor affecting VAT evasion. Meaning

that VAT evasion and administrative have negative relationship, higher the VAT evasion lower the inefficiency, and *vice-versa*.

$H_1$ : There is association between administrative efficiency and VAT evasion.

**Table: 4**  
Relationship of administrative efficiency with VAT evasion

		Administrative efficiency					
Scale of response		Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree	Total
VAT evasion	Strongly disagree	0 [0%]	0 [0%]	0 [0%]	0 [0%]	0 [0%]	0 [0%]
	Disagree	0 [0%]	0 [0%]	0 [0%]	2 [0.5%]	0 [0%]	2 [0.5%]
	Slightly agree	0 [0%]	1 [0.25%]	52 [13%]	74 [18.5%]	3 [0.75%]	130 [32.50%]
	Agree	0 [0%]	12 [0%]	41 [10.25%]	159 [39.75%]	9 [2.25%]	209 [52.25%]
	Strongly agree	0 [0%]	0 [0%]	6 [1.5%]	41 [10.25%]	12 [3%]	59 [14.75%]
	Total	0 [0%]	1 [0.25%]	99 [24.75%]	276 [69%]	24 [6%]	400 [100%]
Gamma ( $\gamma$ ) : (0.501)*							

Source: Field survey, 2025

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 scores of various statements under VAT evasion and the score of statements regarding administrative efficiency. In the cross tabulated matrix, the VAT evasion is being the dependent variable. A Gamma ( $\gamma$ ) test statistic is also computed to show the extent of relationship and its level of significance.

Just combining the respondents of the scales ‘slightly agree’, ‘agree’ and ‘strongly agree’ who responded on VAT evasion forms a 99% of total respondents. The respondents who consider administrative efficiency as a reason for VAT evasion form 98%. Meaning that largest group of the respondents perceive that administrative inefficiency as a reason for VAT evasion. The processing of 5-point scale matrix of ‘VAT evasion’ and ‘administrative efficiency’, the value of Gamma obtained is 0.501, significant at 1% level. It is thus inferred that VAT evasion is affected by administrative inefficiency.

### Perceived Administrative efficiency for VAT collection Analysis

A multiple regression analysis is used to identify the factors affecting Administrative efficiency VAT collection in Nepal. For the analysis, Administrative efficiency of VAT collection (AdmE) is taken as dependent variable whereas it is argued that VAT rate complication (VRC), complex legal provision (CLP), VAT evasion (EV) and incentive for VAT collection (IVC) are the factors affecting administrative efficiency of VAT collection. Similarly, it is also hypothesized that complex legal provisions (CLP) and Administrative efficiency of VAT collection have negative relationship. Therefore, increase in complexity on legal provision leads to increase difficulty in administrative efficiency of VAT collection. Likewise, other factors being constant VAT evasion also leads to Administrative efficiency and there is a negative relationship between VAT evasion and administrative efficiency. Increase in administrative efficiency leads to decrease in evasion of VAT collection. It is expected that administrative efficiency and evasion for VAT collection have negative and significant relationship. VAT incentive for collection (VIC) has also been predicted to have positive relationship, meaning that increase in VAT incentive will increase for a VAT collection and increase in administrative efficiency.

**Table: 5**  
Regression Result: Administrative efficiency for VAT collection as dependent

$$\text{AdmE} = 1.9675 - 0.00236 \text{ VRC} - 0.1076 \text{ CLP} - 0.3217 \text{ EV} + 0.4763 \text{ VIC} + e_i$$

[5.0675] {0.225180}	[0.047353] {0.167334}	[0.0896] {2.12332}	[0.023452] {- 0.569235}	[0.39810] {-10.95431}
Obs; 400 Df; 395	F – statistics (4,395): 48.1456*		Adjusted R <sup>2</sup> :	0.391
Jarque - Bera	-B stat: 2.695 (p-value: 0.03672)		Durbin Watson d test:	1.975
Multicollinearity test:	<u>Variables</u>			<u>VIF</u>
	VAT rate complication			1.1226
	Complex legal provision			1.2824
	Evasion of VAT			1.0866
	VAT incentives for VAT collection			1.0673

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

Multiple regression analysis has been used to identify the factors affecting Administrative efficiency (AdmE), Administrative efficiency has taken as dependent variable, whereas VAT rate complication (VRC), complex legal provisions (CLP), VAT evasion (EV), and incentive of VAT collection (IVC) are taken as independent variables. All the factors under different categories of respondents have been summed up and converted into percentage due to unequal number of statements used to examine different issues relating to administrative efficiency obtained from the summary of total scores of various statements. A multiple regression model has been used and the results are presented in Table: 5

$$AdmE = \beta_0 + \beta_1 VRC + \beta_2 CLP + \beta_3 EV + \beta_4 IVC + \dots + e_i$$

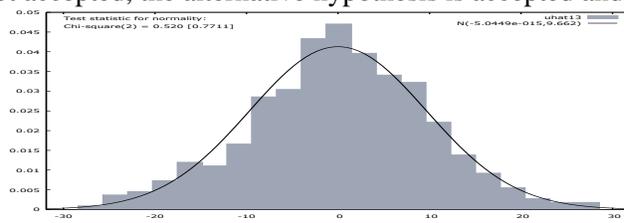
Where,

- AdmE represents administrative efficiency
  - EVC represents evasion for VAT collection
  - VRC represents VAT rate complication
  - CLP represents complex legal provision
  - IVC represents Incentives for VAT collection
- Regression results of VAT evasion

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<sup>2</sup>** : 0.391. The observed adjusted **R<sup>2</sup>** 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 39% by the variables of independent variables included in the model.

**Durbin Watson test:** The Durbin-Watson statistic is always between 0 and 4. DW test-statistics is 1.975 and p-value is 0.0364 < 0.05 significant at 5% level. Therefore, null hypothesis is not accepted, which means that residuals are not auto correlated.

**Normality test:** As is apparent from Tabl:5, the application of *Jarque–Bera test* shows that the JB statistic is 2.695 and the probability of obtaining such a statistic under the normality assumption is 0.03672 i.e. 5% which is very low. Since the **Null hypothesis: residuals are not normally distributed** is not accepted, the alternative hypothesis is accepted and hence the error terms are distributed normally.



**Multicollinearity test: Null hypothesis: explanatory variables are correlated.** As can be seen in Table 5, the VIF for the predictor indicates that the variance of the estimated coefficient of *Weight* is not inflated by a factor of VIF because  $VIF < 10$ . Therefore, the null hypothesis is not accepted and hence, alternative hypothesis that explanatory variables are not collated or the model has no multicollinearity problem. The computed test statistics satisfies the assumption of classical linear regression model. Analyzing the coefficient of all independent variables in the model, the status of hypothesis appears as follows:

*H<sub>1</sub>: There is significant positive relationship between perceived VAT rate complication and the perceived administrative efficiency for collection by the stakeholders*

The coefficient of VR is  $-0.00236$ , which means that 1% change in VAT rate leads to  $-0.00236\%$  change in administrative efficiency. The regression model shows that the t-statistics  $0.3718$  and p-value  $0.013 < 0.05$  significant at 5%. Therefore, the null hypothesis is rejected, implying that VAT rate has significant impact on Administrative efficiency for VAT collection. This result is also confirmed by the Gamma ( $\gamma$ ) test in the.

*H<sub>2</sub>: There is significant negative relationship between perceived complex legal provision and the perceived administrative efficiency for VAT collection by the stakeholders.*

Other factors keeping constant, coefficient of CLP is  $-0.1076$  CLP indicates that 1% change in legal provisions leads to  $-0.1076\%$  point change in Administrative efficiency for VAT collection. The regression model shows that the t-statistics ( $-0.0896$ ) and p-value  $0.8829 > 0.05$ , not significant at 5% level. Therefore, the null hypothesis is accepted, which means that legal provisions have no significant impact on Administrative efficiency for VAT collection. The result can also be confirmed by the Gamma ( $\gamma$ ) test in Table: 4 (the Value of Gamma is obtained at  $0.104$  which is significant at 10% level).

*H<sub>3</sub>: There is significant negative relationship between perceived administrative efficiency and evasion for VAT collection by the stakeholders.*

The coefficient of VAT evasion on Administrative efficiency is  $-0.3217^*$  which implies that the change in 1% on VAT evasion leads to change  $-32.17\%^*$  on administrative efficiency for VAT collection. The regression model shows that the t-statistic and p-value  $0.000 < 0.05$  significant at 5% level. Null hypothesis is therefore, rejected in favor of alternative hypothesis, indicating that VAT evasion has significant negative relationship between administrative efficiency for VAT collection and VAT evasion. The result has also been confirmed by the Gamma ( $\gamma$ ) test. The Value of Gamma is obtained at  $0.501$ , which is significant at 1% level.

*H<sub>4</sub>: There is significant positive relationship between perceived VAT incentives and administrative efficiency for VAT collection by the stakeholders.*

The coefficient of VAT incentives for collection of VAT revenue on administrative efficiency for VAT collection is  $0.4763$  indicating that the change in 1% on VAT incentives leads to change  $0.476\%$  on administrative efficiency for VAT collection. The regression model shows that the t-statistics and p-value  $0.000 < 0.05$  significant at 5% level and hence the null hypothesis is rejected and the alternative hypothesis is accepted, meaning that VAT incentives has significant impact on Administrative efficiency for VAT collection. The Gamma ( $\gamma$ ) test statistics also confirms that the majority of the stakeholders of different groups perceived that VAT incentives as a reason for Administrative efficiency 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 administrative efficiency 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 contribution for VAT, 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 contribution.
- The Gamma statistic from the cross tabulation has showed that there is a relationship of ‘administrative efficiency’ VAT evasion’ with ‘VAT rate’, ‘Legal provision’, and ‘VAT incentives’.
- The regression results show that the sign of all the independent variables are as per priority. The computed F-statistic is also higher than the table value at 99% level of significance, indicating that there is a significant negative and positive relationship between perceived issues regarding VAT administration and the evasion in VAT collection. The adjusted  $R^2$  of 0.39 shows that the variation in dependent variable is explained by 39% by the variables of independents variable included in the model.
- The results of the regression model show that the expected sign of the variable included in the model as per priory expectation. VAT rate complication and complex legal provisions, VAT evasion are negatively related, while incentive for VAT collection is positively related with VAT collection efficiency. The computed F-statistic is also higher than table value at 95% level of significance.

## Conclusion

The various statements related to the issue of administrative efficiency shows an agreement of the respondents in the issues raised under administrative efficiency. 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 (3.80) indicating their agreement with the statements identified for their response. The trend of VAT revenue collection is increasing throughout the study period. The analysis of VAT leakages also shows an increasing trend during the period. It has also confirmed by the opinion analysis of the key stakeholders of VAT that VAT evasion has been significant.

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