

CHAPTER V

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CHAPTER V

SUMMARY OF FINDINGS AND SUGGESTIONS

One of the major goals of public sector reforms was improving the efficiency and effectiveness of public service provision. The Tax administration, as part of the public sector, must face the same goal. One way to improve efficiency and effectiveness is computerisation and a transfer to information-based operations. Information technology support can be created for several services provided by Tax administration, such as completing tax returns, information services and counseling, etc. Therefore it is high time to revamp the existing Tax administration system in terms of tax management, tax structure, tax collection, tax information, policy formulations etc with the help of computer software's and information technologies by identifying the weaknesses, problems, constraints etc of the present Tax administration system. Such an attempt will be useful and helpful to the Government, planners, policy makers, administrators and practicing executives of taxation while formulating their future plans in this direction.

5.1 The Study in Retrospect

Effectiveness of Tax administration in Commercial Taxes Department is not only the performance of the department but also the growth and performance of the entire economy. Since the commercial Tax department of Kerala occupies a predominant position among the various state Government departments in terms of revenue earning. The effective administration practices in Commercial Taxes department are of utmost importance. Efficient Management of Tax administration is crucial in determining the growth and prosperity of the organization. This is particularly true in the case of a Government Department like the Commercial Taxes Department.

The study on the 'Effectiveness of Tax administration in Commercial Taxes Department with special reference to Kerala' identifies five main independent factors and a dependent factor called Effectiveness of Tax administration of the employees. Each identified independent factor consists of sub components. The independent factors and the number of corresponding items of each factor included in the study are as follows.

1. Levy and collection of tax (7Sub factors & 57 Sub items)
2. Audit and Inspection (3 Sub factors & 32 sub items)
3. Training and Development (3 Sub factors & 22 sub items)
4. Check Post Management (3 Sub factors & 23 sub items)
5. Tax reforms and Amendments (8 sub items)

These 16 items are again subdivided into 142 sub items. Taken as a whole, the 142 sub items have been incorporated in these five independent factors for predicting the Effectiveness of Tax administration of Commercial Taxes Department apart from 10 items for comparing the profile of the sample employees.

The study is represented by a total sample of 350 employees and Interview schedules were administered on them for collecting their opinion on the various identified factors. The opinion survey data collected are analysed and interpreted throw light on the base questions stated in the objectives. The objectives of the survey were;

1. To explore the various factors/variables affecting the effectiveness of Tax administration practices in Commercial Taxes Department in Kerala.
2. To examine how the employee designation affecting the perception regarding Tax administration effectiveness.
3. To evaluate the responses of the different categories of employees about effectiveness of the Tax administration of Commercial Taxes Department
4. To ascertain the impact of the tax reforms and amendments on levy and collection of tax.
5. To make suggestions and recommendations for the improvement of the existing Tax administrative practices of Commercial Taxes Department in Kerala

The data for the study were collected from both primary and secondary data. The primary data were collected by conducting interviews with selected respondents by using a structured Interview schedule. The researcher had developed a five point rating scale like the Likert type scale – Highly effective, Effective, Can't say, Less effective, Least effective – for scaling the answers to the corresponding questions.

Before the commencement of interview, a sample schedule as well as a brief explanation regarding the study was given to the respondents. I got an authorization letter from the Commissioner of Commercial Taxes Department was so helpful in this situation. The Commissioner himself communicated it to all the Commercial Tax Offices including check posts. So introduction is not at all necessary in major cases. In all the cases each question or items in the schedule was asked by the interviewer to the respondent employees. A special care was taken to give sufficient time to the employees to reflect and answer the questions. The respondents were encouraged to make their opinions and suggestions freely and frankly on Tax administration Practices in the Department. Throughout the interview, the respondents were given the assurance that it was an independent and unbiased study and that their response would not be disclosed to any one so as to enable them to be honest and coherent in their opinion. The respondents were interviewed taking into consideration their time and availability. Very much time was spent in waiting for the employees to be interviewed, though time had been fixed for their interviews in advance.

All the respondents were collected by the researcher personally moving from one office of the department to another. This further ensured the secrecy of the responses as also the privacy of identities of persons giving responses.

Multistage stratified random sampling method is followed for the selection of the respondents. Altogether there are 4613 employees working in the CTD of Kerala. The present study is limited. Three hundred and fifty respondents belonging to the strata were selected at random for the purpose of this study.

The secondary data were collected from Books, Journals, websites, research articles, seminar reports, study reports of expert committees and commissions, working papers, records maintained in the various Commercial Tax offices in Kerala, GIFT, NIPFP, and other published and unpublished sources

5.2 Identification of factors and items coming under each factor.

The factors and the various items falling under each factor are tentatively identified on the basis of various theories, models, research reports and seminar reports on the topic. Apart from these, the characteristic features of the Commercial Taxes

Department are also considered. After a close perusal of the above stated factors. The various aspects that influence the Administrative practice in the department have been identified, and broadly classified into five independent factors, which is clearly explain in table no 5.1.

Table No. 5.1
Identified factors and sub – sub - factors

Sl. No.	Independent Factors (Number & Name)	Sub factors and Sub – items
1	V1. Levy and collection of tax	7 Sub factors & 57 sub - items
2	V2. Audit and inspection	3 Sub factors & 32 sub - items
3	V3. Training and development	3 Sub factors & 22 sub - items
4	V4. Check post management	3 Sub factors & 23 sub - items
5	V5. Tax reforms and amendments	8 sub - items
Total		16 Sub - Factors & 142 Sub - Items

There are 16 sub factors which are again subdivided into 142 sub items. Taken as a whole, the 142 sub - items have been incorporated in these five independent factors for predicting the Effectiveness of Tax administration of Commercial Taxes Department apart from 10 items for comparing the profile of the sample employees in the first part. Table No. 5.1 Shows the number of identified sub factors and sub – items. Apart from the factors and the items mentioned above, Nine items, viz., (1)Sex, (2) Designation, (3) Academic & Professional Qualification, (4) Total Experience in the Department, (5) Total Experience in the present post, (6) Mode of reaching the present post, (7) Transfer Time, (8) Present District and (9) Preferable District, are identified to draw up the sample profile of the respondent employee.

5.3 Important Findings

5.3.1 Profile of the sample employees

1. A sample of 350 employees were randomly drawn, out of which 174 (49.7%) are male employees and 176 (50.3%) are female employees. Out of the 105

Top level employees, 54 (51.4%) of them are female and 51(48.6%) of them are male employees. The total of 185 middle level employees, 100 (54.1%) of them are female and 85 (45.9%) of them are male respondents. Under lower level employees, 22 (36.7%) of them are female and 38 (63.3%) of them are male.

2. Under this analysis, the Top level employees include Commissioner, Joint Commissioners, Deputy Commissioners (DC) and Assistant Commissioners (AC). In the total sample of 350 employees, 105 (30%) are Top level employees, 185 (52.86%) are Middle level employees, who include Commercial Tax Officers (CTO), Commercial Tax Inspectors (CTI), Intelligence officers and Assistant Sales Tax officers. 60 (17.14%) are Lower level employees who include UD Compilers, Head Clerks and Upper Clerks.
3. The Qualification – wise analysis of respondents shows that 105 (30%) have Post Graduation, 160 (45.7%) have Graduation, 55 (15.7%) have PDC / Intermediate, 20(5.7%) have Professional Qualification and 10 (2.9%) are under other category which means persons below Pre Degree/Intermediate or any kind of Diploma holders.
4. In the case of the experience of the Top level employees of the Commercial Tax Department, all the employees selected in the category have a minimum of 15years experience. But only 5 have experience of 17years and 24years. A highest number of 45 have 29years of experience. The mean experience of the Top level employees in the Commercial Taxes Department is found to be 23.05 years.
5. The average period of experience of the selected Middle level employees of the Commercial Taxes Department is 21.78. The minimum 3years experience is recorded by 5 respondents and a maximum of 30 years by 5 respondents.
6. The average period of experience of the selected Lower Level employees in the Commercial Taxes Department is 13.67years. A minimum of 5 years experience is selected by 10 respondents and a maximum of 22 years was possessed by 25 employees.

7. In case of total experience of all categories of employees in the present position as, a minimum of 1 year experience is selected by 15 (14.3%) Top level employees, 55 (29.7%) Middle level employees and 30 (50%) Lower level employees. The maximum of 8 years experience is shown by 20(19%) Top level employees and 35(18.9%) Middle level employees. But ten among the Lower level employees have a maximum of 5 years experience.
8. Under this 305 (87.1%) of employees reached their position by Promotion and the rest 45 (12.9 %) by Direct recruitment.
9. The mode of transfer of employees in the Commercial Taxes Department, 305 (87.1%) of employees are reached their position by Promotion and the rest of 45 (12.9 %) by Direct recruitment. In the case of transfer of employees, 240 (68.6 %) of the employees say that they get transfer once in every 3 years. The norm for transferring the employees of the department set by the Commercial Taxes Department is also three. 25 (7.1%) of the employees have a transfer after more than every three years. Only 15 (4.3%) have a minimum transfer period of less than one year. 5(1.4%) of them have one year and 65 (18.6%) of them have a transfer period of two years.
10. The employees who are working in the 14 districts are as follows, Trivandrum out of 9(2.6%), 7(6.7%) are Top level employees and 2(1.1%) are Middle level employees. In Kollam 8(2.3), 4(3.8) are Top level employees, 3(1.6%) are Middle level employees and 1(1.7%) are Lower level employees. Pathenamthitta 5(1.4%), 4(3.8%) are Top level employees and 1(.5%) are Middle level employees. In Alappuzha 13(3.7%), Top level employees are 2(1.9%), 7(3.8%) are Middle level employees and 4(6.7%) are Lower level employees. Under Kottayam 119(34%), 16(5.2%) are Top level employees, 70(37.8%) are Middle level employees and 33(55%) are Lower level employees. Idukki 11 (3.1%), 2 (1.9%) are Top level employees, 7 (3.8%) are Middle level employees and 2 (3.3%) are Lower level employees. In Ernakulam 14(4%) of them are selected. Trissur, 23(6.6 %), Palakkadu 9(2.6%), Malappuram 8(2.3%), Kozhikodu 83 (23.7%), wayanadu 12 (3.4 %), Kannur 22 (6.3%) and from Kasargodu 14(4%) are selected.

11. Majority of the employees preferred to work their native districts. The number and percentage of employees and the districts the employees preferred to work were, Trivandrum 9 (2.6%), Kollam 8(2.3%),Pathenemthitta 5(1.4%), Alappuzha 13(3.7%), Kottayam 105 (30%), Idukki 11 (3.1%), Ernakulam 14 (4%), Trissur 23 (6.6 %), Palakkadu 10 (2.9%), Malappuram 11 (3.1%), Kozhikodu 67 (19.1%), wayanadu12 (3.4%), Kannur 37(10.6%), and Kasargodu 12 (3.4%). And a total of 13 (3.7%) of them have no preference for any particular district.

5.3.2 An analysis under each identified independent factors and their sub factor

This was the second stage of analysis. In this stage, different items under the main independent factors were considered for analysis. The primary data collected have been statistically processed, classified and tabulated by using appropriate methods. Tables, figures and statistical results have been derived with the help of computer software package called SPSS (Statistical Package for Social Science). The statistical tools used for analysis are profile analysis, percentage score, all other descriptive statistics, Two way ANOVA, MANOVA, Correlation, Simple Linear Regression and Multi Dimensional Scaling (ALSCAL) Model

The analysis of the data was done in the following manner:

1. At the first stage researcher analysed the profile of respondents in terms of the ten demographic factors given in the interview schedule.
2. At second percentage analyses were made for all the factors that contributed to the effectiveness of Tax administration.
3. There is a Multiple Discriminant Analysis (MDA) were done to identify the prominent factor in each region.
4. Two - way ANOVA and MANOVA were also done to examine the influence of area and designation over different factors on effectiveness of Tax administration.
5. The Correlation and Regression were also done to ascertain the strength of relationships found in the previous analyses.

6. The data further examined by using Multi Dimensional Scaling (ALSCAL) Method.

5.3.2.1 Levy and collection of tax

One of the major reasons affecting the effectiveness of Tax administration in Commercial Taxes Department is the Levy and collection of tax. Under this, the following sub factors were covered by the study

1. Filing of return by dealers
2. Scrutiny of return
3. Return data management.
4. Tax Assessment
5. Appeals, Revision...etc
6. Management Information System(MIS)
7. Computerisation

Against these sub – factors, Fifty seven questions were asked to collect the perception of employees in Commercial Taxes Department regarding the preservation of Levy and collection of tax. Responses were collected on a five point scale from the highly effective to the least effective. The composite score of all the fifty seven questions is taken to present the table.

The computed value of mean, median and mode values under Levy and Collection of tax is 3. The leading sub – factor under the levy and collection of tax are Filing of return by dealers, Return data management, Tax assessment, MIS and Computerisation. The mean value of 4 out of 5 shows that the lion shares are satisfied in the said sub - factors. To further under the nature of responses we look into the composite mode and median for levy and collection of tax. The mode and median are three and the mean value is 3 out of 5, with a standard deviation of 0.3271. That means lions majority of the respondents is positively satisfied to Levy and collection of tax.

The percentage scores obtained for each of these items of the factor, Levy and collection of tax are based on the opinion expressed by the employees. The examination of first sub factor with its sub items reveals that the level of effectiveness

expressed by the total samples is more than 70%, which lies in fair practice continuum.

The opinion of the total sample of respondents about second sub factor scrutiny of return, reveals that the percentage score of eight items were more than 60%. They belong to Fair practice continuum. Tax addition due to scrutiny has a value of 73.66% which is the only factor that has a high score. Adequacy of time for security (59.77%), Possibility for 100% Security (55.77%) and Checking system – Manual (56.29) have a percentage score less than 60 % which comes under the group of Mediocre practices Continuum. That shows in these cases the administration level is moderately effective.

In the case of the rest of the sub factors such as Return Data Management, Tax Assessment, Appeals, revision...etc., MIS and Computerisation, and all their sub items come under this group were included in the status of Fair Practice Continuum. It reveals that the levels of effectiveness expressed are more than 60%.

On the basis of Percentage Score analysis, it is clear that the Levy and Collection of Tax is under the group of Fair Practice Continuum

1. Filing of return by dealers

In case of filing of return by dealers the due date compliance of return, contents which mentioned in the return form, contents of various annexure which attached with the return, return acknowledgement system adopted by the CTD, Tax e-payment system implemented and other type of tax payment system in case of system failure, these all were analysed on the basis of effectiveness level by the sample selected from CTD. It has a more significant impact on the Tax administrative practices in Commercial Taxes Department. From the analysis, it is clear that, the effective function of filing of return is functioning in Central region, because it has a highest mean value (23.76). To test the mean variation of the scores for filing of return among different categories of employees and region, Two – way ANOVA is used and it is found that the designation – wise and region – wise variation of the mean scores is statistically significant at 1% level of significance (**Value of F is 32.304 and 46.081, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that filing of return by dealers has more influence on the effectiveness of Tax administration in CTD of Central region

and especially in the case of Top level employees (mean is 24.199). The mean scores of the respondents of the employees in area – wise and designation – wise in this regard is statistically significant as the f values in the two way ANOVA general linear model is statistically valid and significant with $p=0.001<0.01$.

2. Scrutiny of return

In the case of Scrutiny of return various levels of scrutiny adopted by the CTD, adequacy of time taken for the completion of scrutiny, possibility for the completion of 100% scrutiny, software and manual checking mechanism adopted in the scrutiny, software guidance for the smooth functioning of scrutiny, Generation of defect memo for any defects found in the scrutiny, present mode of mechanism for scrutiny of notice / defect memo, time frame availed for the completion of scrutiny, scrutiny with books of accounts maintained and tax addition due to scrutiny were analysed. In analysis it is clear that, the function of scrutiny of return is effective in Central region, because it has a highest mean value (**38.817**). The mean scores are statistically significant at 1% level of significance (**Value of F is 29.100 and 2.586, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that scrutiny of return has more influence on the effectiveness of Tax administration in CTD of Central region and especially in the case of Middle level employees (mean is **40.063**).

3. Return Data Management

The Return Data Management in CTD were analysed with availability of backlog return data from previous returns, availability of data from current return, frequency for the reporting of current data, adequacy level for return data for the purpose of MIS and software efficiency for return data processing and the generation of reports. It is concluded that, the function of Return Data Management is effective in Central region, because it has a highest mean value (**21.239**). The mean scores are statistically significant at 1% level of significance (**Value of F is 24.901 and 9.822, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that Return Data Management has more influence on the effectiveness of Tax administration in CTD of Central region and especially in the case of Top level employees (mean is **21.421**).

4. Tax Assessment

Tax Assessment is analysed byway of certain sub items such as adequacy of internal data for assessment, availability of external data other than return data for assessment,

adequacy of time frame set for completing monthly assessment, tax addition due to the present system of assessment, dealer co operation in case of yearly assessment and scope for assessment on the basis of audit reports. It has a significant impact on the Tax administrative practices in Commercial Taxes Department. It is clear that, the Tax Assessment is functioning effectively in Central region, because it has a highest mean value (**32.886**). The mean scores are statistically significant at 1% level of significance (**Value of F is 40.749 and 26.179, df is 2 with $p = 0.000 < 0.01$**). Therefore, it may be concluded that Tax Assessment has more influence on the effectiveness of Tax administration in CTD of Central region and especially in the case of Top level employees (mean is **33.462**).

5. Appeals, revision...etc

Appeals, revision...etc is a sub factor analysed with sub items, different levels of appeals and revision from bottom to higher level, functioning of appeal mechanism adopted by CTD, time frame set for the disposal of various appeals, tax addition due to appeals, dealer co – operation in disposal of accounts, statutory fees set by CTD for filing of appeals, possibility of stay of tax in existing value, chance of finality of first appeals and all other type of alternative mechanism for the disposal of appeals and revision (adhalath, settlement...etc.). In the analysis it is clear that, the function of Appeals, revision...etc is effective in Northern region, because it has a highest mean value (**30.210**). The mean scores are statistically significant at 1% level of significance (**Value of F is 112.817 and 0.974, df is 2 with $p = 0.000 < 0.01$**). Therefore, it may be concluded that Appeals, revision...etc has more influence on the effectiveness of Tax administration in CTD of Central region and especially in the case of Top level employees (mean is **33.620**).

6. Management Information System (MIS)

Management Information System (MIS) is analysed by as the functioning mechanism adopted in the CTD, various channels of communication used in the MIS, software assistance in MIS like generation and sending of e-mails on proper time, role of MIS in CTD by the staff members in general, evaluation mechanism for the accuracy of MIS reports, decisions taken on the basis of MIS by employees, directions given on the basis of MIS and corrective measures taken on the basis of MIS reports. It was found that there is significant impact on the Tax administrative practices in

Commercial Taxes Department. It is clear that, the Management Information System is functioning effectively in Central region, because it has a highest mean value (**28.638**). The mean scores are statistically significant at 1% level of significance (**Value of F is 6.759 and 0.716, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that Tax Assessment has more influence on the effectiveness of Tax administration in CTD of Central region and especially in the case of Top level employees (mean is **29.886**).

7. Computerisation

The last sub factor, Computerisation is analysed by the effectiveness of computerization in the following allied areas such as filing of return by dealers, return data management in CTD, tax assessment on the basis of data collected, data availed or generated for shop inspection, check post data management system, vehicle checking in general and detection of tax evasion. It has a significant impact on the Tax administrative practices in Commercial Taxes Department. It is clear that, the function of Computerisation is effective in Central region, because it has a highest mean value (**26.422**). The mean scores are statistically significant at 1% level of significance (**Value of F is 45.318 and 33.582, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that Computerisation has more influence on the effectiveness of Tax administration in CTD of Central region and especially in the case of Lower level employees (mean is **27.334**).

5.3.2.2 Audit and Inspection

Second major reasons affecting the effectiveness of Tax administration in Commercial Taxes Department is Audit and Inspection. Under this, Audit and inspections at three levels were analysed i.e., in dealer premises, vehicle inspection and office audit (A.G Audit). The following sub factors were covered by the study;

1. Audit and inspection in dealer premises,
2. Inspection of goods in transit
3. Internal and A.G Audit

The computed values of Audit and Inspection were valued as 3 in the case of mean, 4 in the case of median and 3 in the case of mode. The leading sub – factor under the main independent factor Audit and Inspection is Internal / A.G Audit. The mean value

of 4 out of 5 shows that majority are satisfied in the case of Internal / A.G Audit activities followed in the CTD. To further under the nature of responses we look into the composite mode and median for Internal / A.G Audit. The mean and mode are 3 and median is 4 out of 5, with a standard deviation of 0.4017. That means the lions majority of the respondents is positively satisfied to Internal/A.G. Audit.

In the case of Audit and Inspection, all the sub items come under the group of Fair Practice Continuum. It shows that all the values are in between 60% to 80% which reveals that, the employees' perspective towards the administration level is fairly effective

1. Audit and inspection in dealers' premises

Audit and inspection in dealers' premises includes Existing mode of shop inspection, frequency of shop inspection in an accounting year, basic criteria for shop inspection(in that way of selection of shop; either alphabetic order or turn over achieved in the last accounting year), grievance redressal mechanism adopted in the shop inspection, dealer co-operation at the time of shop inspection, Books of accounts maintained by the dealer at the time when shop inspected, technical support from CTD at the time of inspection (system support), Police support at the time of inspection and existing mode of preparation and delivery of Shop Inspection Report (SIR) were analysed on the basis of satisfaction level by the sample selected from CTD. It has a significant impact on the Tax administrative practices in Commercial Taxes Department. From the analysis, it is clear that, the effective function of Audit and inspection in dealers premises is functioning in Southern region, because it has a highest mean value (**34.885**). The mean scores are statistically significant at 1% level of significance (**Value of F is 38.954 and 8.420, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that Audit and inspection in dealers premises has more influence on the effectiveness of Tax administration in CTD of Southern region and especially in the case of Middle level employees (mean is **37.250**).

2. Inspection of goods in transit

Inspection of goods in transit were analysed by way of the following sub items such as effective inspection during the time of transit, vehicle checking co-operation and dealer co-operation by the dealer at the time of inspection, basic steps followed by the authority at the time of vehicle inspection, scope of complete inspection of goods,

present verification method of transporting documents, mode of serving defect notice if any false information is communicated through the transporting documents or at the time of vehicle checking, compliance in defective notice generated, additional collection of tax through road inspection, team spirit in vehicle inspection and hands of politicians at the time of vehicle checking. From the analysis, it is clear that, the effective function of Inspection of goods in transit is functioning in Northern region, because it has a highest mean value (**39.168**). The mean scores are statistically significant at 1% level of significance (**Value of F is 5.915 and 34.970, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that Inspection of goods in transit has more influence on the effectiveness of Tax administration in CTD of Northern region and especially in the case of Middle level employees (mean is **37.139**).

3. Internal/A. G. Audit

The Internal/A. G. Audit means, Audits were conducted in the department itself. A separate wing of employees in the CTD called A.G's do the A.G audit. It is also type of internal audit. Under this support from the peer group in the department (different A.G audit teams), frequency of internal checking system (Internal audit) in the CTD, frequency of A.G Audit, Co – operation of employees at the time of A.G. Audit, detection of defects in internal audit and A.G audit, effectiveness of internal audits and A.G Audit and Mode of clearing defects in Internal and A.G Audits were analysed by way of the satisfaction level of employees. In the analysis it is clear that, the effective function of Internal/A.G. Audit is functioning in Central region, because it has a highest mean value (**38.575**). The mean scores are statistically significant at 1% level of significance (**Value of F is 40.183 and 1.468, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that Internal/A.G. Audit has more influence on the effectiveness of Tax administration in CTD of Central region and especially in the case of Top level employees (mean is **41.690**).

5.3.2.3 Training and development

Third independent factor affecting the effectiveness of Tax administration in Commercial Taxes Department is Training and development. Under this, three sub factors and twenty two sub items were covered by the study. They are;

1. Department training practices
2. Areas of training
3. Training results / achievements

The main independent factor 'Training and development' has a mean score value of 4. The median and mode values are 3. Under this the sub factors having highest mean and median values are Areas of training and Training results/achievements, all these have a mean and median value of 4.

It is clear that the Lion percentage of the sub items come under the group of Fair Practice Continuum. But in the case of Adequacy of training centers, the value is less than 60% such as 56.8. This is the only one item under the group of Mediocre practices continuum. In the case of Training centers, only few of them were in Kerala. It makes a lot of inconveniences to employees. Last year, only two or three training were conducted in Kerala.

1. Department Training Practices

Department Training Practices includes different methods of identification of training need, sufficiency of training centers under CTD, selection criteria for training subjects, duration of training to employees, standard / quality of training programmes, training methods adopted, trainers' performance, infrastructural facilities provided in the training centers and interaction opportunities between the employees during the training were analysed. It has a significant impact on the Tax administrative practices in Commercial Taxes Department. From the analysis, it is clear that, Department Training Practices is functioning effectively in Northern region, because it has a highest mean value (**26.422**). The mean scores are statistically significant at 1% level of significance (**Value of F is 124.057 and 39.939, df is 2 with $p = 0.000 < 0.01$**). Therefore, it may be concluded that Department Training Practices has more influence on the effectiveness of Tax administration in CTD of Northern region and especially in the case of Lower level employees (mean is **27.334**).

2. Areas of Training

The sub factor Areas of Training is a sub Factor analysed by the satisfaction level of the sample. Area of training under procedural and legal aspects related with return scrutiny, assessment, disposal of Appeals/ revision and vehicle checking, Computer and allied areas, judicial aspects and case law reviews and recent trends in taxation

were considered. From the analysis it is clear that, the function of Areas of Training is effective in Northern region, because it has a highest mean value (**30.838**). The mean scores are statistically significant at 1% level of significance (**Value of F is 54.776 and 46.590, df is 2 with $p = 0.000 < 0.01$**). Therefore, it may be concluded that Areas of Training has more influence on the effectiveness of Tax administration in CTD of Northern region and especially in the case of Middle level employees (mean is **30.913**).

3. Training Results/Achievements

The Training Results/Achievements includes overall employee development in the department, job efficiency or performance seen, job commitment and motivation shown, monetary benefits attained in the department and service / promotion benefits of employees. It's analysed with the help of 5 point scale. From the analysis, it is clear that, the function of Training Results/Achievements is effective in Southern region, because it has a highest mean value (**16.505**). The mean scores are statistically significant at 1% level of significance (**Value of F is 31.755 and 53.734, df is 2 with $p = 0.000 < 0.01$**). Therefore, it may be concluded that Training Results/Achievements has more influence on the effectiveness of Tax administration in CTD of Central region and especially in the case of Middle level employees (mean is **18.485**).

5.3.2.4 Check post management tomorrow

Fourth factor affecting the effectiveness of Tax administration in Commercial Taxes Department is Check post management. Under this, three sub factors and twenty three sub items were covered by the study. They are;

1. Check post authorities
2. Vehicle checking procedures at check post
3. Collection of advance taxes, penalty and security

The factor, Check post management is under the group of Fair Practice continuum. In the case of the sub item 'award or gift from CTD for the detection of tax evasion', the employees were rated in a value of 58.23. This shows that, in case of issue of awards the employees are in the group of moderate practice continuum. They are moderately satisfied on these things.

1. Check Post Authorities

The Check Post Authorities, which includes awareness of duties and responsibilities at check post authorities, working environment and welfare facilities provided in check post by CTD, security measures for implementing law and order, any award or gift given by the CTD for the detection of tax evasion, inter departmental coordination with motor vehicle department, parcel services, CTD & customs and excise duty, grievance redressal mechanism implemented in the check post & adequacy of computer data's available in the department. In the analysis it is clear that, the function of Check Post Authorities is effective in Northern region, because it has a highest mean value (**24.246**). The mean scores are statistically significant at 1% level of significance (**Value of F is 44.560 and 17.677, df is 2 with $p = 0.000 < 0.01$**). Therefore, it may be concluded that Check Post Authorities have more influence on the effectiveness of Tax administration in CTD of Northern region and especially in the case of Top level employees (mean is **24.207**).

2. Vehicle Checking Procedures at Check Post

Vehicle Checking Procedures at Check Post is analysed by the effectiveness level of certain sub items are present system of checking in the department, detection measures for crimes or offences at check post, disposal of crimes or offences by the check post authority, check post data management / documentation, adequate number of work force available in the check post, role of computerization in evasion detection and support from top management, police force, local persons, RTO, Excise and forest departments. From the analysis it is clear that, the function of Vehicle Checking Procedures at Check Post is effective in Northern region, because it has a highest mean value (**35.011**). The mean scores are statistically significant at 1% level of significance (**Value of F is 14.017 and 13.124, df is 2 with $p = 0.000 < 0.01$**). Therefore, it may be concluded that Vehicle Checking Procedures At Check Post has more influence on the effectiveness of Tax administration in CTD of Northern region and especially in the case of Top level employees (mean is **34.070**).

3. Collection of Advance Taxes, Penalties and Security

Collection of Advance Taxes, Penalties and Security is measured by the satisfaction level of employees. The sub Factors under consideration were cash or chest management adopted in the check post, method of detection in fake cash / DD,

remittance mode of cash at check post, extent of penalty collection, security collection and advance tax collection. From the analysis, it is clear that, the function of Collection of Advance Taxes, Penalties and Security is effective in Southern region, because it has a highest mean value (**19.750**). The mean scores are statistically significant at 1% level of significance (**Value of F is 26.132 and 0.041, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that Collection of Advance Taxes, Penalties and Security has more influence on the effectiveness of Tax administration in CTD of Southern region and especially in the case of Top level employees (mean is **21.110**).

5.3.2.5 Tax reforms and amendments

Fifth major factor affecting the effectiveness of Tax administration in Commercial Taxes Department is the Tax reforms and amendments. Under this, the following sub factors were covered by the study, updation of amendments in statute, effectiveness of amendments in each year, communication mode of amendments from top to bottom, assessment based amendments, inspection based amendments, present procedure simplification amendments, evasion control amendments and political popularity amendments were analysed by the satisfaction level of employees in the department.

The mean, median and mode values of Tax reforms and Amendments are 4. The computed value of 4 reveals that the factor Tax reforms and amendments towards administration is highly effective. From percentage score analysis it is clear that all the items under Tax reforms and amendments have a value more than 70. This shows that it is under fair practice continuum. i.e., Tax reforms and amendments towards Tax administration is highly effective.

Tax Reforms and Amendments have a more significant impact on the Tax administrative practices in Commercial Taxes Department. The function of Tax Reforms and Amendments is effective in Central region, because which has a highest mean value (**28.810**). The mean scores are statistically significant at 1% level of significance (**Value of F is 129.548 and 5.872, df is 2 with p = 0.000 < 0.01**). Therefore, it may be concluded that Tax Reforms and Amendments has more influence on the effectiveness of Tax administration in CTD of Central region and especially in case of Middle level employees (mean is **31.825**).

5.4 An analysis with all five factors combined towards the effectiveness of Tax administration in Commercial Taxes department in Kerala

The relationships of the five independent factors with dependent factors – Tax administration practice – are identified with the help of Correlation Analysis. Correlation is a measure of the degree of relationship between two or more factors. Karl Pearson's coefficient of correlation or simple correlation is the most widely used method of measuring the degree of relationships between two factors.

Comparison of correlation values of all the independent factors to its own sub - factors indicates that almost all the independent factors selected for the study viz., Levy and collection of tax, Audit and inspection, Training and development, Check post management and Tax reforms and Amendments are highly correlated with its sub – factors. It shows the sub factors selected under study have a positive correlation. The relationship between collection and levy of tax and audit and inspection and also between training and development is negative. This negative correlation is also found 99% significant. This means that people who perceive tax collection efficient understand that audit and inspection and training and development are not efficient. Audit and Inspection is functioning by a separate wing in the CTD. There is no enough number of respondents in the audit wing, which makes certain inefficiencies. This study reveals that audit and inspection is not functioning properly. If they conduct proper audit visits, leads to a growth in tax collection. Therefore this relation is a negative correlation. Training and development and collection and levy of tax were under a negative correlation. In the case of training and development, which were given by GIFT to all the respondents, the training were conducted in the following places in Kerala such as Thiruvannathapuram, Ernakulam and Thrissur. This shows that all the employees in Kerala want to participate in the training in these centers. The employees who were working in northern districts can't be able to participate training on proper time. And the subjects selected for training and development were not appropriate. They were going through old syllabus.

The effectiveness of Tax administration is measured by using MANOVA Model in which the five factors such as Levy and collection of tax, Audit and inspection, Training and development, Check post management and Tax reforms and amendments

taken together. Based on mean score variations the respondents of the employees according to their area and designation do vary considerably. And it is also found that Central and North region are more effective in the Tax administration. This can be validated by observing the powerful Pillai's trace and the associated 'f' values in the multivariate tests and in the tests of between subject effects with $P = 0.000 < .005$.

5.5 Multiple Discriminant Analysis (MDA) – A discrimination of factors affecting the effectiveness of Tax administration in different areas

The most significant factor in each region that contributes to the overall effectiveness of Tax administration is determined by applying Multiple Discriminant analysis. It is clear that, overall effectiveness is high at Northern region and is lower at Southern region. The Factors Appeals, revision..etc, Audit and inspection in dealer premises, Inspection of goods in transit, Internal / A.G. Audit, Department Training Practices, Area of training, Training results / achievements, Check post authorities, Vehicle checking procedure at check post and Tax reforms and amendments were highly effective at Northern region, whereas Filing of return by dealers, Scrutiny of return, Return data management, Tax assessment & Computerisation is effective at Central region. And only MIS and Collection of advance taxes, penalties and security is effective at Southern region.

From the analysis it is clear that, the canonical correlation coefficient of 0.740 with 89.8% variance and 0.347 with 10.2% variance are found to be significant at 5% level with a Wilk' Lambda values of 0.398 with chi – square value 312.138 and 0.880 with 43.505. Hence the discriminant function between Southern, Central and Northern region is statistically significant and valid for further analysis.

The Southern and Central regions are placed on the left side of Northern region with group centroid values of negative. The centroid for Northern region is positive. So the cutting point here is zero. Thus factors with negative co-efficient are considered to be dominant in Southern and Central region and the other values are important for Northern region.

The factors with negative coefficients are Tax assessment, Appeals, revision..etc, Computerisation, Inspection of goods in transit, Areas of training, training results / achievements, check post authorities and collection of advance taxes, penalties and

security in Southern and Central region, Filing of return by dealers, Scrutiny of return, Tax assessment, MIS, Computerisation, Audit and inspection in dealers premises, Internal/A. G. Audit, Vehicle checking procedures at check post, and Tax reforms and amendments in Central and Northern region and Tax assessment, Appeals, revision..etc, Audit and inspection in dealers premises, Inspection of goods in transit, check post authorities and collection of advance taxes, penalties and security in Southern and Northern region. But MIS and Internal/A. G. Audit are not considered for classification because the difference in mean scores are found to be insignificant. Thus the rest of them are considered an important discriminant factors at Southern and Central regions. The co- efficient with positive values is dominant in Northern region.

The structure matrix shows that, the factor with high positive correlation coefficient is Department Training Practices (0.344) and the factor with high negative correlation is Appeals, revision..etc (-0.273). Thus it can be concluded that Inspection of goods in transit is the candidate factor that discriminates Central region, while the computerisation is important in discriminating Southern region. From the second structure matrix, it is visible that the factor with high positive correlation coefficient is Inspection of goods in transit (0.447) and the factor with high negative correlation is Computerisation (-0.491). Thus it can be concluded that Inspection of goods in transit is the candidate factor that discriminates Northern region, while the computerisation is important in discriminating Central region. And from the third structure matrix it is visible that the factor with high positive correlation coefficient is Inspection of goods in transit (0.435) and the factor with high negative correlation is Computerisation (-0.484). Thus it can be concluded that Inspection of goods in transit is the candidate factor that discriminates Northern region, while the computerisation is important in discriminating Southern region.

In short, there were 17 sub factors taken together to measure the overall effectiveness of Tax administration in Commercial Taxes Department in Kerala. Kerala is divided into three regions viz., South, Central and North. To identify the most significant element in the effectiveness of tax collection system, the multiple discriminant analysis will be applied region wise, therefore southern, central and northern region will be compared at a time. So out of the 350 cases, 35 cases were relating to southern

region, 167 cases were relating to central area and 148 cases were belonging to northern region. The test of equality of group means shows that there is high validation of certain elements between these two areas as the 'f' value and the associated probability is significant at 5% level of significance. Similarly the discriminant function in the model is also significant with a value of chi – square (1 through 2) is 312.138 and chi – square (2) is 43.505, and the 'p' = .000. Based on the functions at group centroids, the most important and powerful element which determines the effectiveness of the success of Tax administration in the Southern and Central region is Computerisation, while the inspection of goods in transit is the most powerful element in the northern region for the effectiveness of Tax administration. Since the 'p' value is less than 0.05 levels, the alternative hypothesis was accepted. This means that the discriminant functions between Southern, Centre and Northern regions are valid.

5.6 Simple linear regression analysis of the impact of tax reforms and amendments on levy and collection of tax

The impact of tax reforms and amendments on the levy and collection of tax is identified by using a Simple linear regression model in which the beta co-efficient and the associated 't' value are significant at 1% level of significance with $p=0.000 \leq 0.001$. This means the tax reforms and amendments affect the levy and collection of taxation to a greater extent.

5.7 Tenability of the Hypothesis

Based on the findings of the study, the following suggestions are made in the various functional areas of Tax administration, viz., Levy and collection of tax, Audit and inspection, Training and development, Check post management and Tax reforms and amendments.

H_{01} - There is no variation in all the aspects of the effectiveness of Tax administration of CTD among different areas and different categories of employees.

This hypothesis is tested with MANOVA Model and it was found that, the value of 'f' and the powerful Pillai's Trace is significant at 5% level of significance in the multivariate test, and the value of f also in the test of between subject effect of each

Factor. Therefore this hypothesis is rejected with a conclusion that the effectiveness of Tax administration of CTD among different areas and different categories of employees is different.

H₀₂ - The discriminant functions of the factors affecting the effectiveness of Tax administration between Southern, Centre and Northern regions are not valid.

The hypothesis is tested with Multiple Discriminant model which Wilks λ characterised by chi-square is significant at 5% level of significance. Therefore it is concluded that the factors affecting the effectiveness of Tax administration are different among different areas and there may be significant discrimination of Tax administration in all the areas in this regard. So this null hypothesis is rejected.

H₀₃ - Levy and collection of tax is not dependent on tax reforms and amendments.

This hypothesis is tested by applying linear regression model in which the β coefficient and the associated 't' value are significant at 1% level of significance. Therefore the null hypothesis is rejected with a conclusion that tax reforms and amendments affect the levy and collection of tax.

5.8 Suggestions

The Commercial Taxes department is established by the Government of Kerala for the effective administration of tax revenue collection for the State. The Commercial Tax Department has been concerned about developing new ways of improving institutional performance by increasing the effectiveness of Tax administration and providing taxpayer services that may allow the dealers to better comply with their tax obligations.

During the past two decades revenue from Commercial Taxes Department has increased manifold and has come to occupy a pivotal places in tax harmony of state Tax administration. The percentage share of Sales Tax in the total tax revenues of Kerala has been high in comparison to that in neighboring States. Besides mobilizing sizeable resources for the Government, the Sales/Value Added Tax in Kerala performs an important function of strengthening the federal structures by affording a large degree of financial autonomy to the State.

The performance of Kerala state in the spheres of social and economic development has been substantially better than that of the other states. The Department of Commercial Taxes is the major source of revenue to the Government of Kerala, accounting for 3/4ths of its revenues. The Department caters to 1,60,000 traders (tax payers) through 431 offices across the state. Traditionally, tax collection had the image of being corrupt with cumbersome procedures.

KVATIS is the application software developed and deployed by the department to facilitate Tax administration, which can be accessed through the gateway www.keralataxes.gov.in. KVATIS is segregated into both Intranet and Internet versions. The intranet application is accessible only to the employees of the Commercial Taxes Department. The internet application is accessible for the registered VAT dealers and the transporters who consign the goods through check posts.

However, from the qualitative point of view, the performance is less impressive. The recent trends in taxation and the modern management techniques are yet to be adopted by the Commercial Taxes Department due to traditional tax management system and structural constraints. The Commercial Tax Department can enhance its competitive strength, viability and functional performance only by improving the administrative efficiency as well as by evolving an effective Tax administration system.

Based on the findings of the study, the following suggestions are made for the effective Tax administration in Commercial Taxes Department.

1. Data mining cell may be strengthened for the effective utilization of data to facilitate structured research studies with an intention to enhance the present level of tax collection.
2. The KVATIS software may be upgraded to ascertain commodity wise tax potential.
3. Steps may be taken to tap the network / online marketing by introducing appropriate tools for avoiding tax evasion in this sector.
4. The MIS may be strengthened at all levels of administration by adopting latest management techniques.

5. Introduce Integrated Check Post (ICP) at least in border check posts with a provision for data exchange system in respect of the Interstate movement of goods to facilitate effective check post management.
6. Introduce effective training in the application software (KVATIS) to the tax officials at various levels especially in the area of return scrutiny and assessments.
7. Appropriate amendments may be incorporated in the Statutes in consideration of the findings of the various court judgments and the audit remarks of C & A.G department.
8. More banks may be permitted to collect Commercial Taxes through online mechanism.
9. Appropriate measures may be taken for load balancing by installing multiple servers to improve the online submission of returns more effective and comfortable.
10. The direct recruitment of young employees are very low (12% only). It is suggested so as to reduce the shortage of young qualified and energetic blood in the Commercial Taxes Department.
11. Many of the lower level officers are of the complaint that they are not getting support from higher officials for the smooth implementation of Laws. Hence, a congenial climate is to be created between the lower level officers and superiors.
12. Frequent changes in Commercial Tax Laws, Rules, regulations and rates of tax cause much inconvenience and confusion to the employees. Therefore the amendment in Acts, Rules, Rates of Tax should be made only with effect from 1st April of every year.
13. The department should ensure direct communication between the superior officer and the employees in the office. Most of the employees are dissatisfied with the treatment and behavior of their superior officers. However, they find satisfaction in the company of their colleagues and subordinates. The employees should have the freedom to express their ideas and suggestions relating to

- official matters before the superiors. They expect more humanitarian treatment and consideration from their superiors.
14. The new recruiters in the office should undergo 6 months compulsory intensive training in taxation laws, verification of returns, assessment procedures, preparation of notice of demand...etc.
 15. At present the number of vacancies is ascertained on the basis of the number of files handled in the office. This is quite unscientific and it should be done on the basis of the volume of transaction, the amount of tax collection and total work load in the office. Because the researcher had found that, in some offices there is excess staff whereas in some other offices have shortage. Hence there is a need for rearrangement in the CTD.
 16. Training opportunities at training centers should be provided to all employees in all designation at least once in two years. Selection to these training programmes should be solely made on the basis of the requirements.
 17. On the job training of at least one month duration should be made compulsory to all employees at the training centre like GIFT before each promotion. Qualified trainers should be entrusted with the task of giving practical training in this centre. And also the training programme should be designed in such away as to create keen interest in the participants to actively participate in them.
 18. Avoid boring lectures in training centers and instead, provide practical training in the verification of returns, checking of accounts assessment procedures, preparation of notice of demand etc. They should also be given practical training in Vehicle Checking on the roads with the help of the intelligence squad.
 19. Provide food and accommodation facilities, Incentives, TA & DA, training materials and intensive computer training at training centers.
 20. Establishment of District – wise training centers. And the performance of employees should be periodically evaluated and be given necessary training of short duration at district level.
 21. Provide incentive bonus to the employees of the Department in accordance with the volume of sales tax collection, beyond the target assigned to them. And

create a mechanism in the department to recognize and appreciate the good work done by its employees which may really boost the morale of the employees.

22. Along with the seniority, the previous performance and educational qualifications of the employee should also be considered at the time of promotion.
23. Avoid frequent transfers and compulsory transfers to districts other than home district at all level.
24. Work environment and working conditions in most of the check posts are unhealthy. Steps should be taken to provide good food and accommodation facilities in such places. Moreover, sufficient scientific equipments should be made available to the employees in the check post like security guards, electronic dictators...etc.
25. Ensure work equality between same cadres of workers.
26. The Government should take necessary steps to get support to the employees of the Department from the other Department like Police, Revenue and Finance for the smooth discharge of their duties.
27. Most of the Vehicles in the Department are very old and are not in good working condition due to the absence of timely repairs. Therefore steps should be taken for the allotment of vehicles in good conditions to all offices and intelligence squads and there should be provision for its timely repairs.
28. Ensure sufficient office stationery items like writing pad, files, paper...etc. to all offices in the Department.
29. Present tax quota fixation system in the department is quite unscientific which causes much tension to the officers of the department. Therefore, the criterion for fixing the yearly and monthly target of tax collection should be modified. It should be made in a scientific and feasible way in consultation with the concerned officer and by taking into consideration the relevant factors prevailing in the jurisdictional area of the office.

5.9 Scope for further Research

The present study on 'Effectiveness of Tax administration in Commercial Taxes Department in Kerala' is entirely based on the 'employees' perspective. It would be more beneficial if it is studied in its broader aspects and other dimensions of Administration practices in the Commercial Taxes Departments in Kerala. The specific areas of Administrative Practice may be investigated into separately. The researcher would like to suggest the following areas for further research.

1. Effectiveness of Tax administration in dealer / tax payers' perspective.
2. Effectiveness of Tax administration in Tax practitioners / consultants perspective
3. Effectiveness of Training and development in Commercial Taxes Department.
4. A comparative study on the effectiveness of Tax administration of various states in India.
5. A study on tax potential in Kerala.

It is hoped that the present study would provide a strong base for further research in the above areas.