

Chapter 4

Own Source Revenue Mobilisation by Gram Panchayats with a Focus on Outliers

4.1. Introduction

The public finance literature argues that local public good should be financed by the local residents (Report of the 4th SFC, 2011). Second Generation Theories suggest that devolution of functions without finance is meaningless; centre or state governments should assign more taxes to local governments so that they have control over their own source revenues. If a country wants large expenditures to be carried out responsibly by sub-national governments, then those governments need access to some significant revenues for which they are politically responsible (Bird, 2010). The viability, strength and autonomy of local governments depends on the quantum of own resources they can generate and the size of untied grants they obtain (Oommen 2009). If local public goods are financed primarily through higher level governments, it will create a fiscal illusion about the cost of such services (Report of the Fourth SFC, 2011). Hence, mobilisation of own source revenue is a crucial factor in the functioning of local governments.

As the Gram Panchayats in Kerala have been bestowed with larger expenditure responsibilities and are the only local bodies with taxation powers, an analysis of own revenue mobilisation is the first step towards understanding their strength and autonomy. This chapter seeks to take that first step.

The present chapter is divided into five sections. The second and third sections deal with the structure of revenue of Gram Panchayats in terms of tax revenue, non-tax revenue and grants in aid from the state government. The fourth section brings out the problems in the conventional analysis of own source revenue in terms of averages and attempts to identify the influence of outliers on the averages. An analysis of comparison between tax base and own revenue mobilisation is carried out in the fifth section and the sixth section concludes.

4.2. Revenue Sources of Gram Panchayats in Kerala

The Gram Panchayats alone have strong revenue assignments and they hold the commanding heights of Panchayathi Raj Institutions' finance in the state (Report of the Fourth SFC 2011). The major revenue sources of Gram Panchayats include tax and non-tax revenue and state government grants. Table 4.1 gives the revenue structure of Gram Panchayats in Kerala. More than 80% of the revenue comes from state government grants of which 50 % is contributed by the state plan funds. Such large scale devolution of grants was started by the state government in 1996. As suggested by the SGT, the extent of own source revenue is important for strengthening the local government. Own source contributes around 18 % of total revenue of Gram Panchayats; around 10 % of total revenue comes from taxes. For the last five years the trend has been almost persistent indicating that there could be less effort on the part of local governments in mobilising own resources.

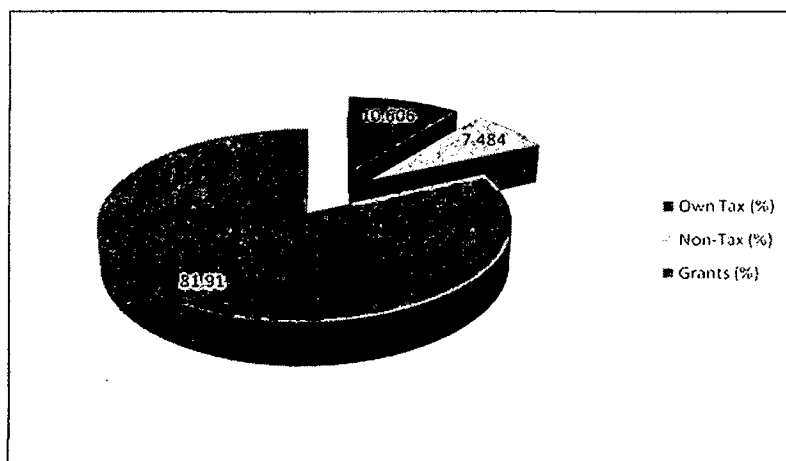
As suggested by SGT the local governments should be able to finance their functions from their own revenue. If higher level of government is financing the functions of local governments to a large extent, then it might lead to less responsible actions by the latter. In the Kerala context, as Gram Panchayats are highly dependent on state transfers (See Figure 4.1) the issue of transfer dependency and soft budget constraint raised by SGT is highly relevant. In order to explicate these issues an analysis of the composition of the finances of Gram Panchayats is called for which is carried out in the next section.

Table 4.1: Revenue Structure of Gram Panchayats in Kerala, 2005-06 to 2009-10

Year	Own Revenue			State Government Grant			
	Own Tax (%)	Non-Tax (%)	Total Own source revenue (%)	General Purpose grants (%)	Maintenance Grants (%)	Plan Grants (%)	Total grants (%)
2005-06	10.00	6.03	16.02	12.36	16.73	54.89	83.98
2006-07	10.75	8.38	19.12	14.50	14.48	51.90	80.88
2007-08	10.77	7.55	18.33	14.64	14.62	52.41	81.67
2008-09	10.53	7.91	18.44	14.89	14.21	52.55	81.56
2009-10	10.98	7.55	18.53	14.01	15.22	52.24	81.47

Source: Panchayat Directorate

Figure 4.1: Composition of Revenue of Gram Panchayats, 2005-06 to 2009-10 (%)

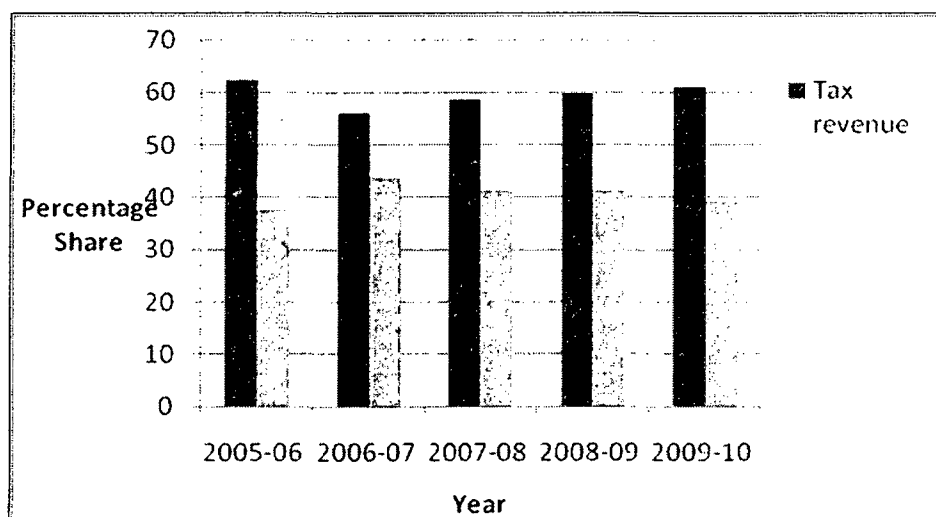


Source: Panchayat Directorate

4.3. Composition of Own Source Revenue of Gram Panchayats

The own source revenue of Gram Panchayats consists of tax and non-tax revenues. There are five items of taxes and around thirty items of non-taxes in the revenue basket. The five major taxes at present are Property tax, Profession tax, Entertainment tax, Advertisement tax and Service Tax. Major items in non tax revenue include receipt from sand mining, rent on land and buildings, market fee, licence fee, permit fee, registration fee etc. The composition of the own source revenue shows that more than 50 percentage of it is contributed by tax revenue (Figure 4.2). In the state as a whole the tax-non-tax ratio of Gram Panchayats' revenue ranges from 62:38 to 56:44.

Figure 4.2: Composition of Own Source Revenue of Gram Panchayats, 2005-06 to 2009-10



Source: Panchayat Directorate

The composition of total own source revenue from 2005-06 to 2009-10 in the districts shows a distinct pattern (Table 4.2). In majority of the districts, the ratio of tax to non tax revenue is close to the state average of 62:38. In Alappuzha and Idukki the share of tax revenue is much higher than 70%. In Kollam, Palakkad, Malappuram, and Ernakulam the share of tax revenue in the total is slightly above 50%. This is on the expected lines as some of these districts (Kollam and Palakkad) have higher number of industrial units as discussed in Chapter 3.

Table 4.2: Composition of Own Source Revenue across Districts, 2005-06 to 2009-10 (%)

District	Tax Revenue	Non-Tax Revenue
Thiruvananthapuram	62.52	37.48
Kollam	59.44	40.55
Pathanamthitta	61.02	38.97
Alappuzha	76.68	23.31
Kottayam	61.63	38.36
Idukki	70.82	29.17
Ernakulam	53.63	46.36
Thrissur	66.11	33.88
Malappuram	55.14	44.85
Palakkad	50.73	49.26
Kozhikode	59.60	40.39
Wayanad	66.25	33.74
Kannur	64.53	35.46
Kasaragod	64.73	35.22
Kerala	62.34	37.64

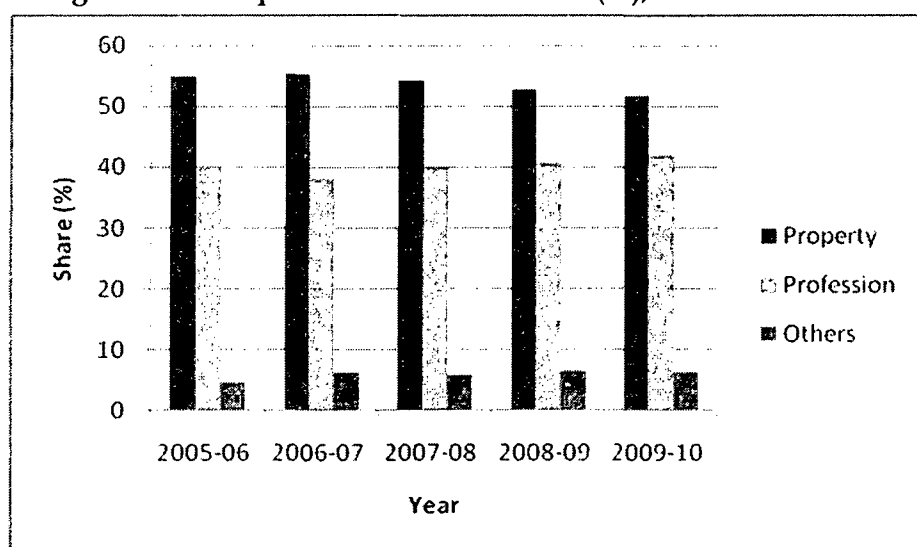
Source: Panchayat Directorate

4.4. Composition of Tax Revenue

The two major sources of tax revenue of Gram Panchayats in Kerala are property and profession tax (Figure 4.3). During the last five years property tax constituted the single major source of tax revenue (accounting for around 55%) of the local governments. But the trend in the productivity of this tax as measured in terms of the collection for the last 5 years shows only a marginal increase (Report of the Fourth SFC, 2011). Moreover, as evidenced by the Demand Collection Balance statement of

the Gram Panchayats, the base of the property tax has not registered any significant increase¹⁸. It is also noted that growth rate of property tax is lower than that of profession tax and again is not on par with the rate of growth in expenditure¹⁹. The reason for this unhealthy situation in the assessment and collection of property tax in the state has been analysed in the various State Finance Commission reports. Even though a quinquennial revision of tax was envisaged in the statutes, no such revision has been made since 1993-94. A number of buildings has been reconstructed or expanded without the knowledge, or connivance of the local governments evading the enhanced tax (Report of Fourth SFC 2011).

Figure 4.3: Composition of Tax Revenue (%), 2005-06 to 2009-10



Source: Panchayat Directorate

The share of profession tax in total tax revenue is around 40 % during 2005-06 to 2009-10. In a good number of Gram Panchayats profession tax has become the major source of tax in recent years²⁰. It is evident that the efficiency in the assessment and collection of profession tax has improved during the last 5 years (Report of Fourth

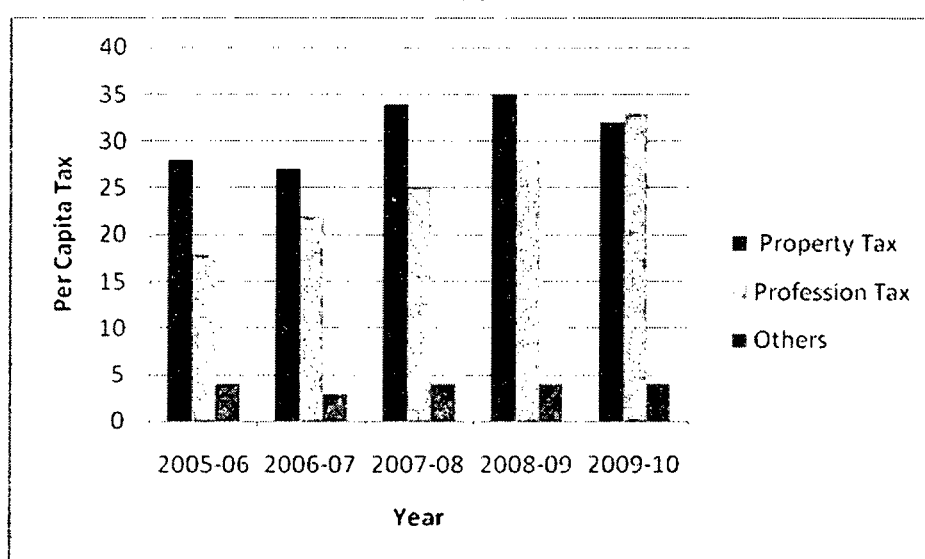
¹⁸ Fourth State Finance Commission examined the Demand Collection Balance (DCB) statement and found that demand statement of property tax has not shown any significant increase.

¹⁹ While the total expenditure increased at an annual rate of 15.4%, property tax increased at only 4.5% per annum and profession tax is increased at 12.9% per annum. The situation is not significantly better when we take into consideration the own tax revenue and own source revenue, because their annual average growth rate was 7.8% and 11.3% respectively as against the expenditure growth rate of 15.4% per annum (Report of Fourth SFC, 2011).

²⁰ The Gram Panchayat wise data shows that in a good number of GPs per-capita profession tax collection is more than that of property tax.

SFC 2011). Property and profession tax together contribute more than 90 % of tax revenue and the contribution of other forms of tax are meagre (Figure 4.3) In per-capita terms, there is a significant improvement in the collection of profession tax during the last five years whereas property tax has shown fluctuations (Figure 4.4). As the autonomy of Gram Panchayats depends heavily on own source revenue, the tax collection, notably property tax collection by the Gram Panchayats, which is poor, requires to be stepped up (Report of the Fourth SFC 2011). Therefore tax performance of Gram Panchayats needs to be considerably enhanced.

Figure 4.4: Per-capita Property Tax, Profession and Other Tax (Rs), 2005-06 to 2009-10



Source: Panchayat Directorate

The composition of tax revenue for the districts of the state for the year 2008-09 is presented in Table 4.5. Since the composition is more or less same for all the five years we have presented the data for one year. Property tax is the single largest contributor to own source revenue ranging from 23% in Ernakulam to 43% in Kozhikode. In the case of profession tax there seems to exist a north-south divide where most of the southern districts report a share of close to 30% and the northern districts around 20%. The most striking thing from the Table is that the share of others in own source revenue is large in almost every district. Ideally, the analysis of own source revenue should be focusing on the 'others' but as it is a mix of a large number of items and as the mix varies depending upon the specificity of the Panchayat the analysis needs to be at that level. So, one may not be able to arrive at common conclusions regarding revenue mobilisation. But in the case of property and profession taxes conclusions need necessarily be drawn by comparative analysis.

Table 4.3: Composition of Own Source Revenue (OSR) of GPs across Districts (%), 2008-09

District	Share of Property Tax in OSR	Share of Profession Tax in OSR	Share of Others in OSR
Thiruvananthapuram	28.25	28.22	43.53
Kollam	35.4	29.41	35.19
Pathanamthitta	31.48	22.72	45.8
Alappuzha	41.99	29.86	28.15
Kottayam	34.18	26.78	39.05
Idukki	32.78	29.74	37.48
Ernakulam	23.34	21.83	54.83
Thrissur	42.08	20.58	37.34
Malappuram	27.81	19.51	52.68
Palakkad	28.05	20.99	50.96
Kozhikode	43.88	15.92	40.2
Wayanad	40.06	19.1	40.84
Kannur	34.7	26.17	39.13
Kasaragod	38.86	23.09	38.05
State	33.04	22.89	44.07

Source: Directorate of Panchayat

The average per-capita own source revenue of the Gram Panchayats in Kerala from 2005-06 to 2009-10 is Rs.161.17 (Table 4.6) ranging from Rs.107 in Thiruvananthapuram to Rs.247 in Ernakulam. It is relatively high in five districts of Kerala (i.e., Ernakulam, Kottayam, Kannur, Kozhikode and Malappuram). Generally, we expect a higher own source revenue from the southern districts which are known to be more developed than the northern districts. But what we see here is that the average per-capita property tax collected in districts like Thiruvananthapuram and Kollam are less than that in Wayanad. Again, in terms of average per-capita profession tax, Thiruvananthapuram and Alappuzha stand behind the backward districts of Kerala. More or less similar is the pattern with regard to other own source revenue. Overall, there is considerable variation in the collection of own source revenue and its components across the districts of Kerala and the pattern does not correspond to our understanding of the differences in the development of the districts.

Table 4.4: Average Per-capita Property, Profession and Own Source Revenue of Gram Panchayats across Districts (in Rs), 2005-06 to 2009-10

District	Average Per-capita Property Tax	Average Per-capita Profession Tax	Average Per-capita Other Own Source Revenue	Average Per-capita Own Source Revenue
Thiruvananthapuram	44.96	26.84	35.9	107.7
Kollam	57.93	48.79	53.36	160.08
Pathanamthitta	56.21	36.24	46.22	138.67
Alappuzha	59.02	18.21	38.62	115.85
Kottayam	77.95	63.3	70.63	211.88
Idukki	58.68	23.66	41.17	123.51
Ernakulam	86.34	78.35	82.34	247.03
Thrissur	70.16	34.84	52.5	157.5
Malappuram	72.85	61.52	67.19	201.56
Palakkad	34.97	35.83	35.4	106.2
Kozhikode	79.64	55.17	67.4	202.21
Wayanad	63.38	32.87	48.13	144.38
Kannur	90.37	48.2	69.29	207.86
Kasaragod	60.51	33.44	46.98	140.93
State	62.73	44.51	53.93	161.17

Source: Panchayat Directorate

It is fairly well known that in the presence of influential observations arithmetic average may not be an appropriate measure and might lead to misleading inferences as shown by Narayana et al. (2010). We make an attempt here to illustrate the magnitude of this problem using the own source revenue of Gram Panchayats for 2008-09 (Table 4.7). A comparison in terms of mean per-capita own source revenue would place Kottayam far above Kollam, but 50% of Gram Panchayats in both the districts collect less than Rs. 84 placing them on par. But a comparison in terms of mean or median would make hardly any difference for Pathanamthitta, Wayanad and Kannur. There may be a few Gram Panchayats in Kottayam which collect large own source revenue pushing the overall average much above that of Kollam. The difference between mean and median per-capita own revenue is large for districts like Ernakulam (2.24), Palakkad (2.24), Thrissur (2.06), Thiruvananthapuram (2.05) and Kasaragod (2.08) as indicated by the ratio of mean to median. It may be inferred that one needs to be cautious in using averages for comparison; what measure is adopted needs necessarily be guided by an understanding of the distribution.

Table 4.5: District wise Mean and Median Per-capita Own Source Revenue in GPs, 2008-09

Name of the Districts	No. of GPs	Mean Per capita OSR (Rs)	Median Per capita OSR (Rs)	Ratio of Mean to Median
Thiruvananthapuram	72	145	70	2.05
Kollam	64	129	83	1.56
Pathanamthitta	51	171	112	1.53
Alappuzha	63	68	65	1.05
Kottayam	53	158	84	1.89
Idukki	46	125	74	1.70
Ernakulam	75	296	132	2.24
Thrissur	90	212	103	2.06
Malappuram	91	146	80	1.83
Palakkad	86	193	86	2.24
Kozhikode	74	147	103	1.43
Wayanad	24	173	114	1.52
Kannur	75	171	113	1.51
Kasaragod	36	167	80	2.08
Kerala	900	164	92	1.76

Source: Narayana et.al, (Table No.4)

4.5. Identifying Outliers

An outlier is an observation that is numerically distant from the rest of the data. An outlying observation or outlier is one that appears to deviate markedly from other numbers of the sample in which it occurs. Outlier can occur by chance in any distribution, but they are often indicative either of measurement error or that the population has a heavy tailed distribution. In our case the presence of outliers is evident from the huge difference between mean and median in own source revenue. To identify the outliers we used the following formula,

$$\text{Outliers} = Q_3 + K(Q_3 - Q_1)$$

Q_3 = Third quartile of a distribution

Q_1 = First quartile of a distribution

K = A constant

Here we are testing for outliers at the upper end of the distribution, which can be done by using the above formula. $(Q_3 - Q_1)$ is the spread of middle 50 percent of the

distribution. Generally, the value of K is fixed at 1.5, but we can give different values for K, to understand the variation. Here the value of K is taken as 1.5. The results are shown in Table 4.8

Table 4.6: Outlier Gram Panchayats in terms of Own Source Revenue in Kerala

Name of the District	Total No. of GPs	No. of GPs having data	No. of outlier GPs	Percentage of outlier GPs
Thiruvananthapuram	78	72	5	7
Kollam	71	64	3	5
Pathanamthitta	54	51	5	10
Alappuzha	73	63	0	0
Kottayam	75	53	6	11
Idukki	52	46	3	7
Ernakulam	88	75	22	29
Thrissur	92	90	13	14
Malappuram	102	91	15	16
Palakkad	91	86	13	15
Kozhikode	78	74	8	11
Wayanad	25	24	4	17
Kannur	81	75	6	8
Kasaragod	39	36	3	8
Total	999	900	106	12

Source: Computed using the data from Panchayat Directorate

Table 4.8 shows that there exists enormous variation in the proportion of outlier Gram Panchayats across the districts of Kerala. The proportion of outliers ranges from zero in Alappuzha to 29 % in Ernakulam and 7 out of the 14 districts of the state have 10 to 17 percent of the total Gram Panchayats as outliers. As expected, districts with larger proportion of outliers report higher mean to median ratio as the cases of Ernakulam, Thrissur, Palakkad and Malappuram reveal. However, there are exceptions like Kasaragod which need to be explained differently.

In the case of Thiruvananthapuram and Kasaragod, although the proportion of outliers are relatively low the ratio of mean to median own source revenue is high. These two cases indicate that it is not only the proportion of outliers but also the distance from the third quartile that influences the ratio of mean to median own source revenue. The larger point made is the limitation of the proportion of outliers

in the analysis and the need to incorporate the distance from third quartile as well. That would probably explain why 7 out of the 14 districts with comparable proportions of outliers report very different ratio of mean to median own source revenue.

4.6. Tax Base and Own Revenue Mobilisation

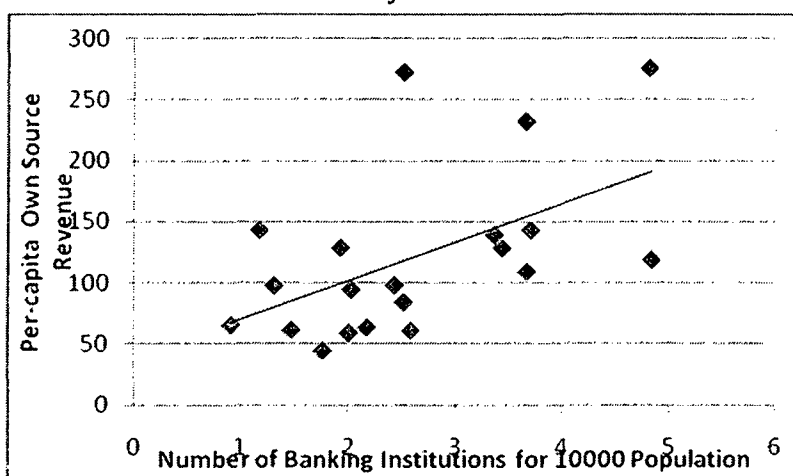
In the previous sections, an analysis of large variation in own source revenue across Gram Panchayats is carried out. As we discussed in Chapter.3 own revenue mobilisation can be expressed as a function of tax base and tax effort. In this section we make an attempt at relating the variations in tax base to the variations in own source revenue and profession tax in the process taking the necessary steps to introduce the tax effort as one of the determining factors of own source revenue of Gram Panchayats.

Tax base is discussed in terms of residential buildings, number of industrial units and number of banking institutions in the previous chapter. As there was no large variation in residential buildings across Gram Panchayats, it is unlikely to explain the variation in own source revenue in a conventional analysis. Taking number of industrial units and number of banking institutions as measures of tax base, scatter plots were developed to explore the relationship between them and own source revenue and profession tax for seven districts for which comparable data were available. However, no easily interpretable relationships were discernable. But there were some observable patterns that could explain the relationship between own source revenue and tax base on the one hand and profession tax and tax base on the other. We present results for three of these districts, namely Wayanad, Palakkad and Kasaragod in that order.

In the case of Wayanad, generally Gram Panchayats with larger number of banking institutions per 10,000 population mobilise large own revenue per-capita but there are exceptions (Figure 4.5A). At comparable levels of banking institutions there are Gram Panchayats which collect more own source revenue as well as less. As regards those which collect more revenue, three Gram Panchayats (which lie above Rs. 200 line) mobilise twice the own source revenue of comparable Gram Panchayats. All the three Gram Panchayats are larger in terms of population size and are major trade and administrative centres. Regarding the five Gram Panchayats that lie below the trend line there are no special characteristics which would explain their lower

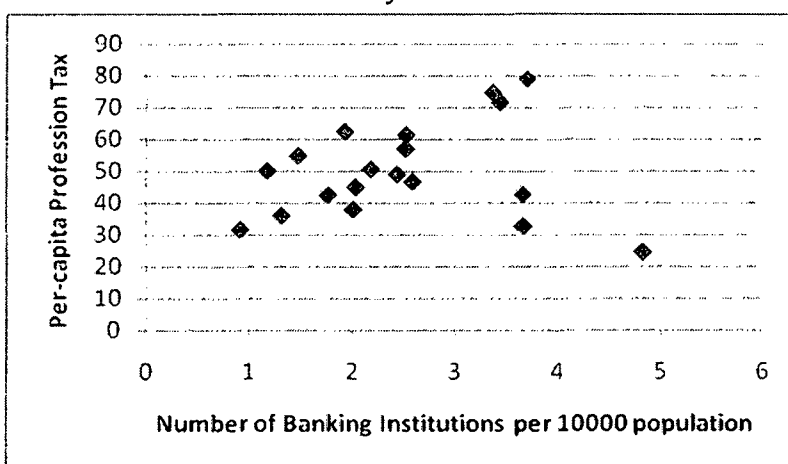
mobilisation of own source revenue. In order to see whether these Gram Panchayats are deficient in terms of other formal institutions we explored the relationship between number of banks and number of industrial units which showed a strong positive relationship. Gram Panchayats which have larger number of banks also have larger number of industrial units. So, the poorer own revenue mobilisation could be because of lower effort on the part of these Gram Panchayats.

Figure 4.5A: Relationship between PC OSR and Number of Banking Institutions, Wayanad



Source: Panchayat Level Statistics 2006, Panchayat Directorate

Figure 4.5B: Relationship between PC PROF and Number of Banking Institutions, Wayanad

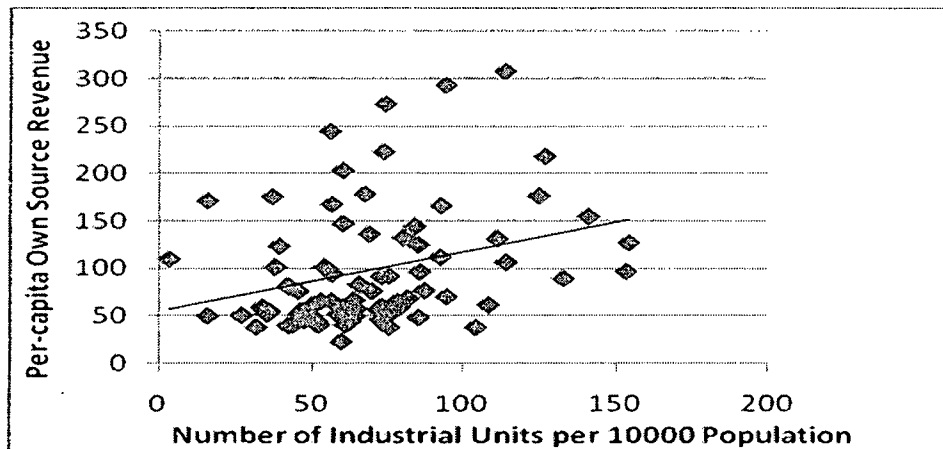


Source: Panchayat Level Statistics 2006, Panchayat Directorate

Figure 4.5A shows the scatter plot of the number of banking institutions in a Gram Panchayat and the per capita own source revenue. While the trend line has a positive slope, too many Gram Panchayats scatter around the line. Part of the reason could be that own source revenue is an aggregate and there is too much noise in the relationship. A better plot would be one between the number of banking institutions and the per capita profession tax, which is shown in Figure 4.5B. The relationship comes out much better with the Gram Panchayats having more number of banking institutions showing higher profession tax. However, three Gram Panchayats which have larger number of banking institutions report fairly low collection of profession tax owing to some specificities like large proportion of tribal population and higher concentration of agricultural labourers.

In Palakkad there is a positive relationship between per-capita own revenue and industrial units per 10,000 population (Figure 4.6A). Palakkad depicts a reality different from that of Wayanad where Gram Panchayats with comparable number of industrial units collect varying levels of own source revenue. The aggregate nature of own source revenue might be bringing some noise in to the relationship. To minimise such noise we put the per-capita profession tax and number of industrial units on a scatter (Figure 4.6B). Though the relationship becomes much clearer, the problem of Gram Panchayats at comparable number of industrial units collecting varying levels of profession tax persists. Could it be owing to the influence of other tax bases? We explored the relationship between number of banking units and number of industrial units which showed a positive relation (Figure 4.7). On an average Gram Panchayats having larger number of industrial units also have larger number of banking institutions, but the variations in the number of banking institutions at a given level of industrial units is large. This could be part of the explanation for the variation in profession tax observed in Figure 4.6B. There could be other factors influencing the variations in the profession tax mobilised, one of which could be the varying effort of Gram Panchayats in mobilising profession tax.

Figure 4.6A: Relationship between PC OSR and Number of Industrial Units, Palakkad



Source: Panchayat Level Statistics 2006, Panchayat Directorate

Figure 4.6B: Relationship between PC PROF and Number of Industrial Units, Palakkad

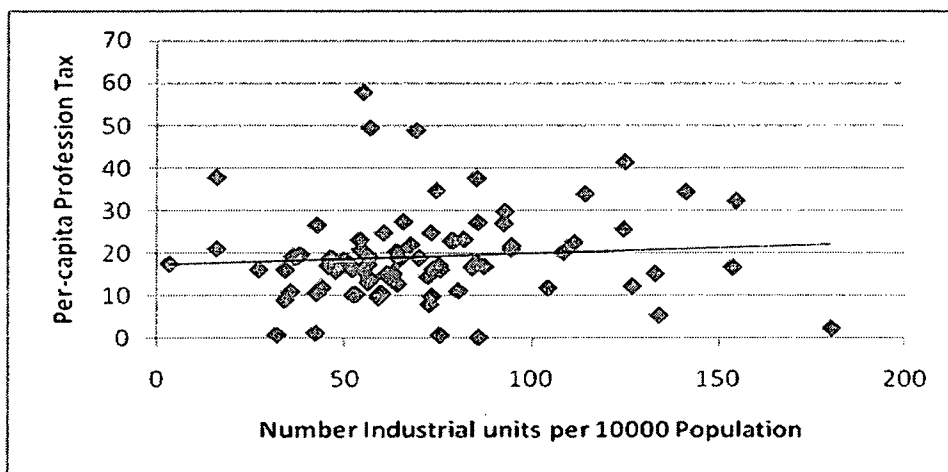
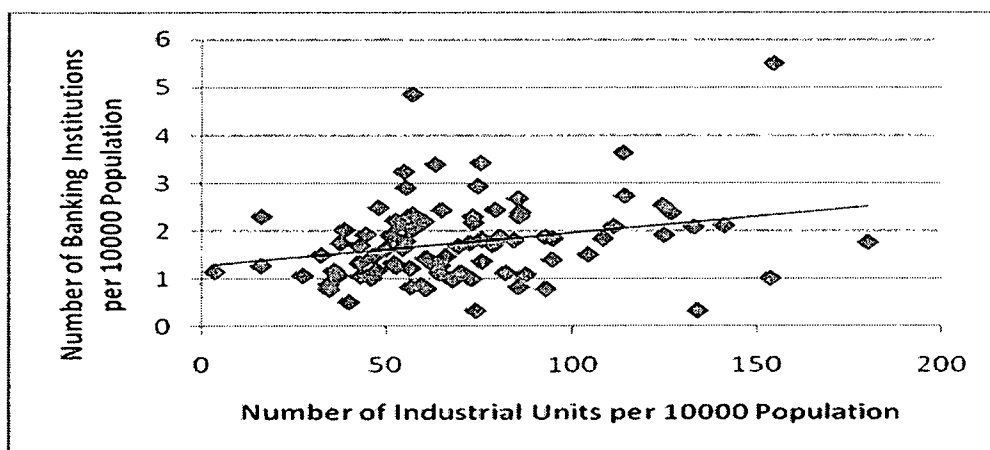


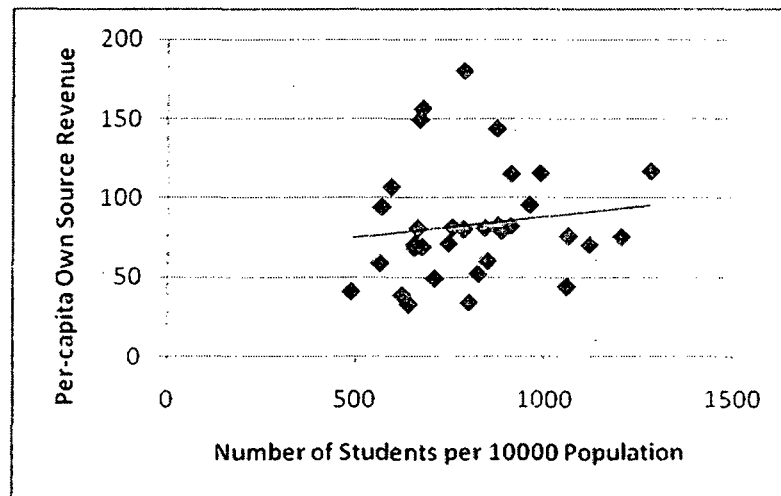
Figure 4.7: Relation between Number of Industrial Units and Number of Banking Institutions, Palakkad



Source: Panchayat Level Statistics 2006, Panchayat Directorate

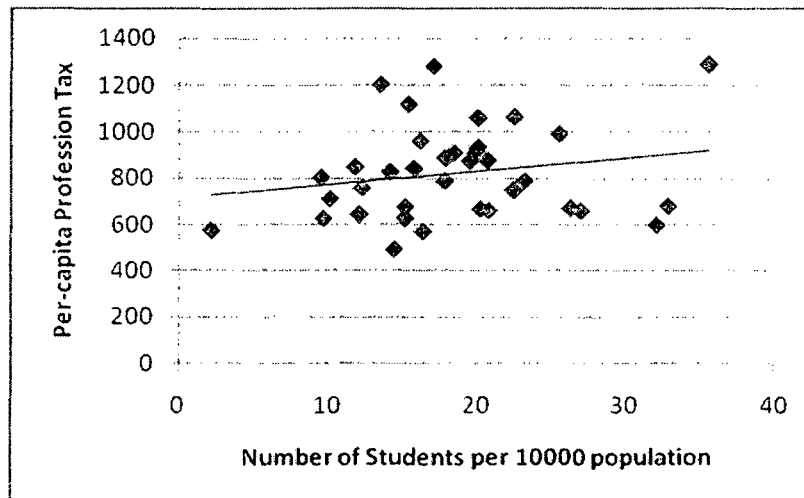
As in the case of Wayanad and Palakkad, in Kasaragod also the relationship between per-capita own source revenue and tax base seems to hold (Figure 4.8A). But the proxy used for the tax base is the number of students²¹. To avoid the problem of aggregation we put the number of students and per-capita profession tax on a scatter and the relationship is much clearer in Figure 4.8B.

Figure 4.8A: Relationship between PC PROF and Number of Students, Kasaragod



Source: Panchayat Level Statistics 2006, Panchayat Directorate

Figure 4.8B: Relationship between PC PROF and Number of Students, Kasaragod



Source: Panchayat Level Statistics 2006, Panchayat Directorate

²¹ As the data on industrial units are not available for Kasaragod we used the number students, which will reflect the number of teachers and professionals working in that Panchayat.

The relationship between tax base and own revenue mobilisation are on the expected directions as the cases of Wayanad, Palakkad and Kasaragod show. Broadly the pattern is the same in all the three districts, but the variations in own source revenue at comparable levels of tax bases are also large. Part of the reason for this large variation could be the clouding of this relationship by the high share of 'others' in own source revenue. In order to resolve this problem we selected the own source revenue component most proximate to the tax base. The problem of large variation at comparable levels of tax base came down suggesting healthy relationship. We estimate the strength of these relationships by resorting to a regression analysis.

Profession tax is collected from all the companies and individuals transacting business or engaged in a profession for at least 60 days in a half year. In the Kerala context, the professionals in a Gram Panchayat are mostly teachers, banking professionals and industrial workers. Since data are not available for these categories number of students, number of banking institutions and number of industrial units are used as proxies. We assume that as the number of these formal institutions goes up the number of professionals increases and Gram Panchayats having more formal institutions will be collecting more profession tax. The confirmatory regression exercise is confined to three districts. The regression equation taken is the following,

$$\ln PC PROF = a + \beta_1 \ln NB POP + \beta_2 \ln NI POP + \beta_3 \ln NS POP$$

PC PROF = Per-capita Profession Tax

NB POP = Number of Banking Institutions per Population

NI POP = Number of Industrial Units per Population

NS POP = Number of Students per Population

Before running the regression we tested the correlation between explanatory variables. Only for Palakkad we had data for all the three variables and there is a significant correlation between the three variables and hence we used only one of them. The regression results show statistically significant coefficients for all the three districts: in Wayanad and Kannur number of banking institutions per population is

significant and in Palakkad the number of industrial units per population is significant (Table 5.3).

Table 4.7 Regression Coefficients of Profession Taxes on its Respective Tax Bases

Districts	Constant	NS_POP	NB_POP	NI_POP	R ²
KSD	11.68 (1.98)	66.97 (1.19)	5760 (0.42)		0.040
WYD	0.98 (0.07)		14370** (2.99)	4025 (1.62)	0.54
PKD	12.35 (3.05)			1903*** (3.72)	0.136

Source: Panchayat Level Statistics 2006, Kerala State Resource Group

** Significant at 5 percent level

*** Significant at 1 percent level

This section sought to examine the relationship between own source revenue and select tax bases. Since the variation in the number of residential buildings per household across the Gram Panchayats was not large the other tax bases (formal institutions) were plotted against the own source revenue to examine the relationship. Even though a positive relationship was observed clarity was lacking; the relationship becomes clearer between the per-capita profession tax and number of formal institutions. Still there are large variations in profession tax at comparable levels of tax bases; this could be indicating the role of effort factor on the part of Gram Panchayats. Further, a regression analysis carried out to test the strength of the relationship between profession tax and number of formal institutions confirms the positive relationship.

4.7. Conclusion

This chapter explored the variations in revenue mobilisation across districts and attempted to illustrate the influence of outliers on averages of own source revenue which are conventionally used in the analysis. The exercises carried out to relate tax base to own revenue mobilisation and profession tax across the Gram Panchayats showed positive relationships. However, the large variations in own source revenue and profession tax observed at any given level of tax base may be because of the lack of efficiency of Gram Panchayats in mobilising revenues. A World Bank study on

fiscal decentralisation to rural governments (2004) argues that the main factors constraining revenue raising by Panchayathi Raj Institutions in Kerala include unwillingness by local officials to enforce tax laws, limited capacity of PRI officials to administer a tax system; weak administrative procedures; poor definition of property tax base, and need for more productive bases to tax. While such studies describe the multiple factors constraining revenue mobilisation, to capture the interplay of these factors a measure of effort is needed. An exploration of such a measure is the subject of the next chapter.