CHAPTER V

REDISTRIBUTIVE IMPACT OF THE PERSONAL

INCOME TAXATION IN NEPAL

Introduction :

•

Although the inequalities in the distribution of income and wealth are global phenomena, they are more glaring in developing countries.¹ Developing countries of today are, in fact, characterised by the existence of extreme inequalities in income and wealth distribution.² The existing inequalities are likely to be aggravated as these countries proceed towards higher level of economic growth. Faster rate of industrialization, urbanization and growth of agriculture through the use of modern productive resources, technology and modern method of production have generated new economic inequalities.³ As Prof. Lakdawala observes, "the economic history of countries is replete with such instances in the early part of the Industrial Revolution,

^{1.} Lakdawala, D.T., <u>Taxation and the Plan</u>, Popular Book Depot, Bombay, 1956, p.73.

^{2.} Government of India, <u>Report of the Taxation Enquiry</u> <u>Commission</u>, 1953-54, Vol.1, p.146; Tripathi, R.N. <u>Public Finance in underdeveloped countries</u>, op.cit., p.89.

Ahmed, Mehfooz, "Taxation and changes in Income Distribution", <u>Indian Economic Journal</u>, Vol.XII, No.4, April-June, 1965, pp.380-381.

which have been aptly styled as the curse of Midas, where wealth accumulates but man decays."4

141

As a matter of fact, during the process of economic growth the economy gradually transforms itself from a subsistence self-sufficient system with customary mutual right and obligation into a market economy governed by contract and competition which in turn gives rise to accumulation of income and wealth by the handful of persons, depriving a majority of their customary entitlements, making majority, thereby, mere survivors. Thus the marketization of economy brought about by the process of economic growth leads, unavoidably, to the extreme inqualities in income distribution.⁵ Regarding the process of how economic inequalities worsen during process of economic growth, Prof. Lakdawala's observations are illuminating. He states, "development mainly consists in the establishment of opportunities for better life, and these are likely to be availed by various groups broadly according to their existing economic strength. Planning means in concrete terms more

4. Lakdawala, D.T., <u>op.cit.</u>, p.74.

5. See - Curien, C.T., 'State and Market in Economic Processes: Some Basic Issues', Paper presented as the first waheedudin Khan Memorial lecture, Hyderabad, February 10, 1986. Curien, C.T., Victims of Economic Change: A Systemic perspective of the Marketization Process in Third World Countries, invited Paper for the XI World Congress of Sociology, New Delhi, August 18-22, 1986. irrigation facilities, better and quicker transport, better communications, cheap and adequate power, finance at reasonable rates of interest etc. Most of these services are in the first instance mainly useful only to large and medium producers who have a surplus to sell, and to those who are or can easily be made creditworthy."⁶ It is because of these processes of transfer of economic power gradually from masses to the handful of people during economic growth that only a small proportion of them rise high to the income pyramid as the countries move towards high level of development. The large section of the population, thus, can not avail of the fruits of economic growth. So the high growth rate is no guarantee against continuing poverty,⁷ at least in the initial stages.

The governments have, of course, been implementing various welfare programmes for the upliftment of the survivors in these countries but due to institutional and several other barriers the benefits have not reached the real target group. And as a result, a pyramid type of income distribution has evolved in developing countries. Inflation has further aggravated the situation in this regard in many of these countries.

6. Lakdawala, D.T., op.cit., p.74.

^{7.} Haq, Mahbub ul, <u>The Poverty Curtain: Choices for Third</u> <u>World</u>, Oxford University Press, Delhi, 1976, p.32.

Income Distribution in Nepal :

Data regarding the income and wealth distribution are extremely limited in Nepal. The only data available in this regard is from the "Survey of Employment, Income Distribution and Consumption Patterns in Nepal" conducted by the Planning Commission in 1977. Since then neither followup has been done to that survey nor any additional work has been attempted so far. Since this survey was confined only to the income and expenditure of the sample families, data relating to distribution of wealth is completely absent in Nepal.

The data supplied by this survey also have several limitations. It does not provide data on the distribution of income and expenditure on the basis of the occupation. It represents situation perceived at a point of time. It was carried over in 128 village panchayats and in 10 Town Panchayats out of a total of 3339 village panchayats and 18 town panchayats respectively in 1977 in Nepal. In the agricultural incomes, there is likely to be an underestimation of incomes arising out of vagaries in the minds of farmers about their total produce of all types (including the minor ones) and the price at which they are valued, particularly the self-consumed portion of the produce. Elsewhere in other secotrs subsidiary and casual sources of income are likely to be underreported. Richer households may have a

tendency to underreport the incomes. Also the component of owner occupied houses is missed. Any way the data supplied by this survey provide some clue with respect to the nature of income distribution in Nepal. The data supplied by the survey are presented in Table V-1 below.

TABLE V-1

Percentage Distribution of Families and

Income class	Percentage of	Percentage Share in	Cumulative centage	Per-
	Families	Total Income	Families	Income
1	2	3	4	5
Below 500	2.94	0.08	2.94	0,08
500 - 1500	10.20	1.17	13.14	l.25
1500 - 2500	15.87	3.65	29.01	4.90
2500 - 3500	14.99	5 .17	44.00	10.0 7
3500 - 4000	7.22	3.12	51.22	13 .1 9
4000 - 5000	10.12	5.24	61.34	18°43
5000 - 8000	16.65	19.60	77。99	38.03
8000 - 10000	5.85	6.06	83.84	44.09
10000 - 15000	6.33	9。10	90 .17	53,19
15000 - 25000	4.13	9.51	94.30	62 .7 0
25000 - 40000	2.61	9 .7 6	96,91	7 2 . 46
40000 - 7 5000	2.05	13.53	98,96	85.99
7 5000 and above	l.04	14.01	100,00	100.00
Total	100.00	100.00	-	-

Their Share in Total Income in 1977

Source : Government of Nepal, The Survey of Employment, Income Distribution and Consumption Patterns in Nepal, 1977, p.91. According to this, 51.22 per cent of the sample families who earned income less than Rs.4000 each per annum received only 13.19 per cent of the total income in 1977 where as the top 9.83 per cent of the total families who earned income Rs.15000 or above each per annum received 46.81 per cent of the total income. And top one per cent families earning income of Rs.75,000 or more each per annum received 14 per cent of the total income. The extreme inequalities of income distribution in Nepal are evident.

In the face of such a glaring picture of inequalities in income distribution, 'the government can not afford to leave the problem of equity to the automatic functioning of the economic and social forces.⁸ Also the constitution of the country itself envisages the establishment of the exploitationless society.⁹ In this connection, taxation, among other measures, can be and has been used to aid eqalitarian distribution of income. And among taxes, income tax is the best weapon in the state armoury to adjust its taxation system to the requirement of justice.¹⁰ According to the celebrated Carter Commission also equity requires heavy reliance on income taxation.¹¹

8.	Government of India, <u>Report of the Taxation Enquiry</u> <u>Commission</u> , Vol.1, op.cit., p.145.
9.	The Constitution of the Kingdom of Nepal, 1962.
10.	Lakdawala, D.T. Justice in Taxation in India, op. cit., p. 51.
11.	Report of the Royal Commission on Taxation, Vol.2, Canada, 1966, p.44.

Income Tax and Its Impact on Distribution of Income :

146

Income tax system has been assuming paramount importance in public policy not only in terms of mobilization of resources for development but also in terms of mitigating the inequalities in income distribution.¹² Income Tax has distinct superiority over other taxes in terms of revenue productivity and in terms of mitigating the economic inequalities because of its progressive nature, which is based on the ability-topay principle. A progressive income tax structure and its effective administration reduces the inequalities in income distribution after tax.¹³ But its effectiveness to reduce inequalities is greatly restricted in countries where incomes from all sources are not being brought into the income tax net. Agricultural income is the important case in point. In almost all the developing countries including Nepal and India, agricultural income which constitutes lion's share in the national income is outside the income tax net. So the progressive income tax has no effect at all on the inequalities

^{12.} Gupta, Anand P., "Central Government Taxes: Have They Reduced Inequality", <u>Economic and Political Weekly</u>, January 22, 1977, p.88. Gupta, Anupam, "Income Distribution, Tax Yield and Progression in Income Taxation", <u>Economic and Political Weekly</u>, October 14, 1974, pp.2111-2118.

Basu, Sreelekha, "Distribution of Income Among Tax Payers", <u>Economic and Political Weekly</u>, January 25, 1975, p.123.

existing in the agriculture sector. In this case, progressive income tax structure can by no means, achieve the horizontal equity. What it achieves is only the vertical equity among the tax payers on income other than agricultural income.

147

Another important limitation of this tax with respect to its redistributive impact is that since this is a tax on income, it can not reach the inequalities in accumulated income, that is, wealth. A separate tax on wealth is required to mitigate inequalities in wealth. And wide spread avoidance and evasion of income tax by high income groups and lack of experience in tax administration have also greatly restricted the real efficacy of income tax structure to narrow down the gap between rich and poor in developing countries.¹⁴

The third limitation of the income taxation in Nepal from the point of view of distributive justice is the omission of Dividends Income from the calculation of income for tax purposes according to the Nepalese Income Tax Act.

A further blunting of the edge of the income tax progressiveness occurs through a separate counting of interest income which is taxed separately at separate rate and not included in the aggregate income.

14. Lakdawala, D.T., Justice in Taxation in India, op.cit., pp.24-26.

tax purposes in Nepal. So personal income tax system is virtually the individual income tax system in Nepal. Of course, agricultural income is exempt from income taxation as mentioned earlier. So, here we will examine the redistributive impact of income tax system among the individuals who pay tax on income other than agricultural income. For reasons explained earlier, we have excluded salary incomes from the discussion below.

149

The Data :

The redistributive impact of the income tax structure is measured by way of comparison of the distribution of income among tax payers before and after tax. Income before tax includes gross income and assessed income and income after tax is the disposable income. So data of these three forms of income are necessary for the study of such nature. The data of mere total income of any of these forms of the whole of the tax payers in any year do not suffice to such study. The data on distribution of these incomes among the tax payers belonging to various income levels are also required for this. The tax demand on all these income levels are also equally necessary. But such data are not available in Nepal, in a published or an unpublished form. They had to be painstakingly constructed by us.

So we have used here, the data maintained in ledgers in the Department of Taxation which we had copied down on the basis of the random sample of 10 per cent for the estimation of the elasticity and buoyancy of the income tax revenue discussed in chapter IV. But these data also have several limitations for our purpose here.

Only two types of figures, as we know, have been maintained in those registers. They are, the figures of assessed income which is the gross income less deductions other than exemption limit of each tax payer and tax demand on them. The figures of gross income and disposable income are not available.

Although the data in each individual entry in the registers give assessed income, we infer that the assessed income and gross income do not differ much because the extent of tax concessions is rather small.

Since redistributive impact of any income tax structure is measured through the comparison of inequalities in income distribution before and after tax, we need the data of incomes after tax also. So for this, we have substracted the respective figures of tax demand from each item of assessed income. So here the figures of income before tax is the assessed income and the figures of income after tax are the figures of assessed income less the figures of tax demand.

We shall measure the redistributive impact of tax structure effective during the year 1980-81. In other words, this measurement will show by how much inequalities in income distribution were reduced among tax payers under the tax structure effective during 1980-81. The point to note at the outset 1s that this measurement reflects only the partial picture of the redistributive impact of the said tax structure. This is because agricultural and salary incomes are not included in this measurement.

The Methodology :

The difference in inequalities in income before tax and income after tax is generally called the redistributive impact of income tax structure,¹⁵ So the first stage in the measurement of this impact is to measure the inequalities in the distribution of income before and after tax. There are various methods of measuring the inequalities but Lorenz Curve and Gini-Coefficient are widely used.

Lorenz Curve and Gini-Coefficient :

For Lorenz Curve, the income recipients are ranked from the lowest to the highest level, that is, in ascending order.

,51

^{15.} See-Gupta, Anupam and Agrawal, Pawan K., <u>op.cit</u>., p. 36 Basu, Sreelekha, <u>op.cit</u>., p.123, Gupta, Anupam, <u>op.cit</u>., p.2111. Mahfood, Ahmed, <u>op.cit</u>., p. 387, Gupta, Anand, P. <u>op.cit</u>., p.94.

Then we mark-off the horizontal axis into equal intervals of income receipients and we mark-off the vertical axis by the percentage of income received by the respective cumulative percentage of income recipients. Then we plot the points on the curve where the respective lines of income recipients and their cumulative incomes, from the horizontal and vertical axis respectively intersect.

52

This means that zero per cent of the population obtains zero per cent of income and 100 per cent of the population obtains all the income. If every one has the same income, the Lorenz Curve will be a diagonal with a slope of 45°. But in the absence of perfect equality, the bottom income group receives proportionately lower share of income. It is, therefore, obvious that the Lorenz Curve would be below the diagonal and its slope will generally increase as we move to richer and richer sections of the population. So a Lorenz Curve runs from one corner of the unit square to the diametrically opposite corner. And the coefficient of inequality for a lorenz curve is the area between the curve and the diagonal line divided by the area of the triangle under the diagonal. It has a maximum value of one when the lowest 99.999 per cent of the population receive no income and a minimum value of zero when all incomes are equal. And the departure from the perfectly equal distribution of income is measured numerically through the Gini Coefficient.

Gini-Coefficient is nothing but the lorenz ratio. This is also called the concentration ratio. Gini coefficient is defined as the ratio of the difference between the line of absolute equality (the diagonal) and the lorenz curve to the triangular region underneath the diagonal which is exactly the same as of lorenz ratio as mentioned above. Numerically, it is exactly one half of the relative difference, which is defined as the arithmetic average of the absolute values of differences between all pairs of incomes. In statistical measure, it can be expressed as follows:

$$G = (1/2 / n^{2} \overline{y}) \sum_{i=1}^{n} \sum_{j=1}^{n} |Y_{i} - Y_{j}|$$

$$= 1 - (1/n^{2} \overline{y}) \sum_{i=1}^{n} \sum_{j=1}^{n} \min(Y_{i}, Y_{j})$$

$$= 1 + (1/n) - (2/n^{2} \overline{y}) \sum_{i=1}^{n} Y_{1} + 2Y_{2} + 3Y_{3} + \dots + nY_{n})$$
for $Y_{1} \ge Y_{2} \ge \dots \ge Y_{n}$

Where G stands for Gini Coefficient

n stands for population

- **Y** stands for average income
- Y₁ stands for highest income

Y₂ stands for second highest income and so on.

The Table prepared for the Lorenz Curve can be directly used as the values of the natations given in the equation. So we have measured the inequalities in income distribution for

our purpose on the basis of the Lorenz Curve and Gini-Coefficient.¹⁶

154

The Result

We classified the total tax payers into 20 frequencies consisting of 5 per cent each on the basis of the income arranged in ascending order from lowest to highest level alongwith the assessed income received by the respective frequencies of the tax payers. This gave us the distribution of income among the tax payers in absolute as well as in relative terms. These figures alone show that the bottom 5 per cent of the total tax payers received only 1.69 per cent of the assessed income before tax where as the top 5 per cent tax payers received 31.03 per cent of the assessed income. In the same way, the bottom 5 per cent have received 2.01 per cent of the income after tax where as the top 5 per cent are left with 23.32 per cent of income after tax. Then, from this, we prepared the cumulative percentage of income and tax payers. Then we plotted these figures in the vertical and horizontal axis respectively to draw the lorenz curves of income before tax and that of income after tax as said earlier. The percentage distribution of the assessed income before and disposable income after tax and. distribution of tax liability including their cumulative percentage is presented in Table V-2.

^{16.} For Lorenz Curve and Gini-Coefficient, See-Cowell, F.A. <u>Measuring Inequality</u>, Philip Allan Publishers Limited, Oxford, 1977, pp.115-116. Sen, Amartya, <u>on</u> <u>Economic Inequality</u>, Oxford University Press, Delhi, 1975, pp.29-31. Stigler, George J., <u>The Theory of Price</u> (Third Edition), Macmillan Publishing Co., Inc. Newyork, 1966, pp.293-294.

,		:
	TABLE V-2	
	R	

n of Assessed Income, Disposable Income	al Income Taxation in Nepal
Percentage Distribution of A	and Tax Lubbility of the Personal Income Taxation in Nepal

			TABLE V-2			-
- د د د م	Perce	atage Distributio	n of Assessed In	Percentage Distribution of Assessed Income, Disposable Income	¢.	
° ****	and T	ax Liability of t	the Personal Inco	and Tax Liability of the Personal Income Taxation in Mepal	1	155
	,	1	(198081)			2 H
Percentage of Tax	Asses	Assessed Incone	Di sposable	ble Income	Xar	Liability
rayers	As % of Total	Cumulative Percentage	As % of Total	Cumulat i ve Percentage	As % of Total	Cumulative Percentage
1	2	3	4	5	6	7
First 5 Per cent	1,69	1,69	2.01	2.01	0*05	0*05
Second 5 Per cent	1° 79	3 ° 4 8	2.12	4.13	0°10	0°15
Third S Per cent	1.90	5 , 3 8	2.25	6°38	0,11	0° 26
Fourth 5 Per cent	1.96 L	7.36	2.34	8 . 72	0°13	9° 39
Elfth 5 Per cent	2.09	9.44	2.45	11.17	0.16	0.55
sixth 5 Per cent	2.25	. 11.69	2,65	13,82	0-20	0.75
Seventh 5 Per cent	2.39	14.08	2.81	16.63	0° 25	1. 00
Eighth 5 Per cent	2.51	16 . 59	2.93	19•56 ,	0.33	1.33
Minth 5 Per cent	2+66	19•25	3.11	22-67	0.40	E7.1
Tenth 5 Per cent	,2,85	22,10	3.31	25 -9 8	0.53	2, 26
Bleventh 5 Per cent	3.11	25.21	3 ° 29	29.57	0.69	2.95
Twelveth 5 Per cent	3.32	28 . 53	3,80	33.37	0.87	3.82
Thirteenth 5 Per cent	3,65	32,18	4.15	37.52	1°15	4.97
Fourteenth 5 Per cent	4.00	36,18	4.49	42.01	1.47	6.44
Fifteenth 5 Per cent	4.34	40 . 52	4 - 85	46 e 86	1.79	8, 23
Sixteenth 5 Per cent	4.94	45.46	5 . 44	52.30	2,35	10,58
Seventeenth 5 Per cent	_5 , 93	51,39 -	6.40	58.70	3,58	14,16
Eighteenth 5 Per cent	7.35	58°74	7°24	66.44	5°38	19,54
Mineteenth 5 Per cent	10,23	68.97	10.20	76.68	10.14	29 - 68
Top 5 Per cent	31,03	100,00	23.32	100.00	70,32	100°00
Gint-Coefficient	ı	0.452	,	0.375	ł	0.841

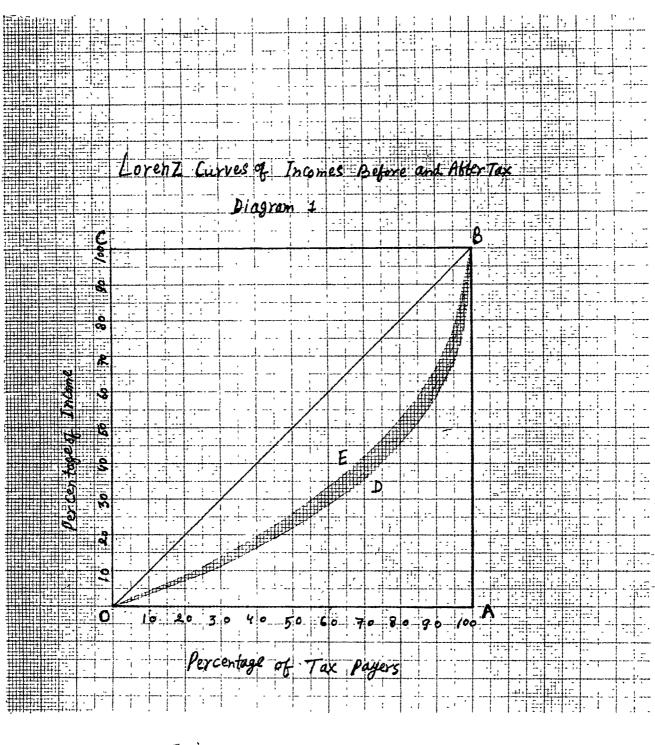
Source : Prepared from a ten per cent sample from the ledgers, \boldsymbol{b}

<

,

,

156



- •

This is only concern texpenyers

• 、

Two separate lorenz curves, one of income before tax and another of income after tax have been \approx , drawn from the figures of income distribution given in Table V-2. The curves are presented in diagram 1.

The diagram clearly shows that the lorenz curve of income before tax, that is, ODB deviates more from the diagonal OB, at all points, than the lorenz curve OEB of income after tax. It means that the distribution of income before tax is more unequal than that of income after tax. And, the difference between the areas from diagonal to lorenz curve of income before tax and lorenz curve of income after tax, that is, ODBE (the Shaded area) is the redistributive impact of the income tax structure effective during 1980-81.

The numerical value of the inequalities in income distribution before and after tax as shown by the respective lorenz curves have been calculated on the basis of the formula of Gini Coefficient as given above the result of which is given in the last row of Table V-2. According to it, the Gini-Coefficient or Concentration ratio of the distribution of income before tax has come out to be 0.452 and that of income after tax is 0.375. Then the difference between these two ratios,¹⁷ that is, 0.077 (0.452-0.375=0.77) 17. Gupta, Anupam, and Agrawal, Pawan K. op.cit.,pp.42-43.

indicates the reduction of inequality in income distribution due to the income tax structure effective during 1980-81. In other words, it may be said that the redistributive impact of the said tax structure is 0.077.

The Basis of the Redistributive Impact of the Income Tax Structure :

The redistributive impact of the income tax structure is a function of two factors, namely, effective rates of (tax and the degree of progression of the tax structure.¹⁸ The effective rates of tax in different income classes is a weighted average of the tax rates applicable to the different income levels within the respective income classes, with the share of total net income in respective income classes being the weights.¹⁹ This can be expressed in the following equation.

$$ERT = \bigvee_{i=1}^{n} ERT \frac{x_{i}}{x}$$

where ERT

X_i stands for different income levels within the income class. X stands for Income class.

stands for effective rate of tax

18. <u>Ibid.</u>, p.43.

19. Gupta, Anupam, op.cit., p.2116.

Ab one wants to ace the matpor distrib effort. one Arandet Todae not reported inc. but seal inc. Is The information That The crinclicitate how calculated not abready available canomonly?

The effective rates of tax of different income classes calculated by this equation is given in column 4 of Table V-3. In the Table, it is seen that the effective rate of tax for the bottom 5 per cent tax payers is only 0,49 per cent where as that of top 5 per cent tax payers is 37.18 per cent. This gradual rise of effective tax rates in subsequent income levels is the principal basis of the redistributive impact of the income tax structure. This upward variation of effective tax rates in subsequent income levels is nothing but the progression of the tax structure. But mere variation in effective tax rates in different income levels does not give us the actual numerical value of the progression. Since the redistributive impact of any tax structure depends. mainly, upon the degree of progression contained in that tax structure, it becomes necessary to measure this degree to know how much redistributive capacity the said tax structure possesses.

159

There are various methods applied for the measurement of the degree of progression as has been discussed in chapter II of this study. (Average rate progression, liability progression, and disposable income progression) but for the situation like this where Gini-Coefficient of the distribution of income before tax has already been derived and data on the tax liability of different income levels is available the summary measure of progression suggested by Kakwani²⁰ is most appropriate and we have followed this method to measure the degree of progression of tax structure effective during 1980-81. According to the summary measure of progression the difference between the Gini-Coefficient of the distribution of tax liability and that of distribution of income before tax gives us the degree of progression of any tax structure.

So, we have calculated the Gini-Coefficient of the distribution of tax liability as that of incomes before and after tax and is presented along with others in Table V-2 above. The Table shows that the Gini-Coefficient of the distribution of tax liability has come out to be 0.841. Such a high ratio is always natural under progressive tax structure. The distribution of tax liability among the tax payers is such that the bottom 5 per cent tax payers pay only 0.05 per cent of total tax liability whereas the top 5 per cent pay 70.32 of total tax. So the degree of progression of tax structure effective during 1980-81 comes out to be 0.389 (0.841-0.452 = 0.389). The degree of progression and the extent of reduction of inequalities in income distribution after tax are positively related.

^{20.} Kakwani, N.C., "Measurement of Tax Progressivity: An International Comparison", <u>Economic Journal</u>, March 1977, pp.71-80.

•	
TABLE V-3	

Distribution of Assessed Income, Disposable Income Tax Liability

•

ţ

ł

Preconcision of Tax	•			(1980-81)				4
1 2 3 3 6 5 5 per cent $(, f, y)$ 5,77,460 2,823 5,74,637 0,49 10,499 10,446 5 per cent 6,11,466 5,556 6,05,310 0,91 11,117 11,016 5 per cent 6,74,500 6,74,531 7,368 6,69,133 1,09 12,300 12,771 5 per cent 7,7664 11,490 7,56114 1,50 12,761 12,771 5 per cent 7,76,561 11,490 7,56114 1,50 12,771 5 per cent 8,75,60 11,490 7,56114 1,50 12,771 5 per cent 9,74,618 11,762 8,96,469 2,45 14,560 15,711 5 per cent 9,73,674 30,001 9,44,673 3,643 14,560 17,151 6 per cent 9,73,674 30,001 9,44,673 3,643 14,593 19,752 7 per cent 10,65,503 13,1313 46,60 3,693,463 2,45		Assessed Income (in &.)	Tax Liabillty (in E.)	Disposable Income (in k.)	Effective Tax Rate in Percentage	Net Income per tax Payer (in m.)	Disposable Income per tax Payer (in R.)	Tax Liabil per ta Payer (in B.
Pirse 5 per cent $(f ^4)$ $5, 77, 460$ $2, 823$ $5, 74, 637$ $0, 49$ $10, 499$ $10, 446$ Becould 5 per cent $6, 11, 466$ $5, 556$ $6, 05, 310$ $0, 91$ $11, 111$ $11, 016$ Turd 5 per cent $6, 48, 000$ $6, 232$ $6, 41, 796$ $0, 36$ $11, 210$ $12, 300$ $12, 310$ $12, 120$ $12, 172$ Purch 5 per cent $6, 73, 536$ $6, 93, 66$ $1, 26, 900$ $12, 310$ $12, 712$ $12, 712$ Strich 5 per cent $7, 76, 600$ $11, 490$ $7, 56, 114$ $11, 200$ $12, 712$ $12, 712$ Strich 5 per cent $9, 14, 679$ $1, 230$ $11, 713$ $11, 713$ Strich 5 per cent $9, 73, 676$ $20, 001$ $9, 44, 679$ $2, 455$ $11, 773$ $11, 713$ Strich 5 per cent $11, 31, 313$ $4, 36, 683$ $2, 45$ $21, 696$ $11, 773$ $11, 713$ Ztenth 5 per cent $11, 23, 231$ $9, 43, 673$ $21, 696$ $11, 5, 556$ $11, 773$ $11, 1, 713$		I	3	m	•	5	Q	7
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5 per cent	5.77.	2, 823		0.49	10,499	10,448	51
5 per cent 6,48,000 6,202 6,41,796 0,96 11,781 11,66 5 per cent 6,76,521 7,368 6,69,153 1.09 12,300 12,166 5 per cent 7,67,604 11,490 7,56,114 1.50 13,956 1,3747 5 per cent 8,14,588 13,762 8,00,826 1.69 14,810 14,560 5 per cent 9,06,666 22,227 8,863 2.45 16,522 16,522 16,117 5 per cent 9,06,666 22,227 8,863 2.45 16,522 16,522 16,513 5 per cent 10,62,909 39,556 10,24,333 3,63 19,325 18,624 5 per cent 11,33,319 49,609 10,84,710 4,29 20,605 19,723 18,624 5 per cent 11,31,31319 49,609 10,84,710 4,29 20,605 19,722 19,722 6 per cent 11,31,31319 49,609 10,84,710 4,29 20,605 19,722 19,722 6 per cent 11,31,31319 49,609 10,84,710 4,29 20,605 19,722 19,722 6 per cent 11,31,31,319 49,609 10,84,710 4,29 20,605 19,722 19,722 6 per cent 11,31,512 19,60,027 6,79 20,606 19,723 19,5293 13,524 10 6 b 5 per cent 11,31,512 13,60,027 6,79 20,606 19,723 19,5299 10,12 6 b 5 per cent 11,31,612,527 11,22,00,741 7,61 20,641 29,249 10 6 c 6,98 5,631 1,31,529 15,53,714 7,61 20,641 29,249 10 6 c 6,98 5,631 1,31,529 15,53,714 7,61 20,641 29,249 10 6 c 6,98 5,691 10 29,21,946 16,529 11,20,994 71 6 c 7 20,25,614 30,005 5,561,01 29,21,968 15,53,714 7,61 10,641 29,249 10 6 c 6,98 5,691 10 29,219 16,52,513 11,20,09 5,691 10 12 6 c 6,54,132 37,138 15,53,714 7,61 10,641 29,249 10 6 c 6,54,132 37,138 15,53,714 7,61 10,642 53,126 73,128 1,92,593 1,20,994 71 7 c 6,55 c 6,554,132 20,0404 18,5,537 14,12 2,00,91 11,20,09 5,610 10,29 25,091 1,20,994 71 7 c 6,55 c 6,554,132 20,0404 18,5,537 14,12 20,094 16,553,730 10,954 71 7 c 6,55 c 6,554,132 20,0404 18,5,537 14,12 20,694 15,56 6,54,132 14,12,12,09 14,12 20,599 14,12 20,599 14,12 20,599 14,12 20,599 14,12 10,645 6,544 10,105 2,545 10,105 2,545 10,105 2,545 10,105 2,545 10,105 2,545 10,105 2,545 10,105 13,120 14 10,2,599 14,12 1,100,159 14,10 1,100,159 15,1200 14 16,12 1,100,159 14,12 1,100,159 15,120,094 16,12 14,100,110 16,554,132 14,14 1,100,159 14,12 1,100,159 15,120,094 16 16,120 14,120 14,120 14,120 14,120 14,120 14,100,159 14,100 14,100 14,100,150 14,100,150 15,120,094 16 1	5 per cent	6,11,	5,556			11,117	11,016	101
Pourch 5 per cent 6,76,521 7,368 6,69,153 1,09 12,100 12,166 71:th 5 per cent 7,06,626 6,934 6,99,692 1,256 13,747 Sixth 5 per cent 7,06,626 8,14,588 13,762 8,00,826 1,490 14,810 14,550 Sixth 5 per cent 8,14,588 13,762 8,00,826 1,5550 15,127 Seventh 5 per cent 9,07,606 22,227 8,86,469 2,45 16,521 16,117 Stath 5 per cent 9,74,512 30,001 9,44,673 2,45 16,127 16,117 Terenth 5 per cent 9,74,513 3,69 1,7103 17,157 16,117 Terenth 5 per cent 1,1,31,313 4,660 10,44,710 4,23 23,678 13,763 17,157 Thirteenth 5 per cent 1,1,31,313 4,660 10,44,710 4,23 23,678 23,591 13,159 Thirteenth 5 per cent 1,1,	10	6,48,000	6,202			11,781	11,669	zitz
Tith 5 per cent 7,08,626 6,934 6,99,692 1.26 12,784 12,711 Sixth 5 per cent 7,67,604 11,490 7,55,114 1.50 13,956 13,747 Sixth 5 per cent 8,14,588 11,762 8,00,826 1.6 14,810 14,560 Sixth 5 per cent 8,14,588 11,762 8,00,826 2.15 15,550 15,127 Sweeth 5 per cent 9,09,696 22,227 8,85,663 2.16 15,550 15,117 Kinth 5 per cent 9,714,674 30,001 9,44,673 3,63 19,335 18,214 Tenth 5 per cent 10,62,903 3556 10,24,153 3,63 21,570 13,715 Theivth 5 per cent 11,31,313 43,663 11,82,994 5,16 23,676 23,570 1 Thirteenth 5 per cent 11,33,313 43,663 1,32,114 7,013 21,556 23,671 23,671 23,676 23,676 23,679 23,5701 1 Thirteenth 5 per cent 11,33,3		6,76,521	7, 368	6,69,153	1,09	12,300	12,166	134
Sixth 5 per cent 7,67,604 11,490 7,56,114 1.50 113,956 13,747 5 eventh 5 per cent 8,14,588 13,762 8,00,266 1.69 14,610 14,560 5 guilt 5 per cent 8,14,588 13,762 8,00,266 1.69 14,610 14,560 15,215 8,16,524 15,17 7 7 16,117 7 17 17 17 17 16,117 7 17 17 17 17 17 17 17 17 17 17 17 1	n	7,08,626	8,934	6,99,692	1. 26	12,884	12,721	162
Sevench 5 per cent $8,14,568$ $11,762$ $8,00,826$ $1,69$ $14,810$ $14,560$ Righh 5 per cent $9,55,285$ $19,422$ $8,35,883$ $2,15$ $15,550$ $15,213$ Winth 5 per cent $9,00666$ $22,227$ $8,86,469$ $2,45$ $15,550$ $15,117$ Tenth 5 per cent $9,001$ $9,44,673$ $3,063$ $11,703$ $17,103$ $17,157$ Fleventh 5 per cent $10,62,909$ $38,556$ $10,24,353$ $3,63$ $19,325$ $18,624$ Teltenth 5 per cent $11,31,319$ $49,609$ $10,84,710$ $4,29$ $20,605$ $21,509$ Thirteenth 5 per cent $11,31,312$ $64,338$ $11,82,994$ $5,16$ $23,691$ $23,791$ Thirteenth 5 per cent $11,91,322$ $8,461$ $12,80,027$ $6,79$ $26,918$ $23,691$ Striteenth 5 per cent $14,80,529$ $1,01,929$ $15,53,714$ $7,81$ $20,641$ $20,219$ $23,791$ $23,791$ Striteenth 5 per cent $14,90,529$ $1,01,2717$ $22,08,747$ $12,000$ $55,5371$	ŝ	7,67,604	11,490	7,56,114			13,747	209
Rigth 5 per cent 8,55,285 18,422 8,36,863 2.15 15,520 15,213 Ninth 5 per cent 9,08,696 22,227 8,86,469 2.45 16,117 Tenth 5 per cent 9,73,674 30,001 9,43,673 3,06 17,103 17,1137 Tenth 5 per cent 10,62,909 38,556 10,64,713 3,63 19,325 19,572 Therenth 5 per cent 11,31,313 48,669 10,64,713 4,29 20,605 19,772 Thirteenth 5 per cent 11,31,313 48,669 10,641 21,616 21,509 Futtreenth 5 per cent 13,63,527 82,461 12,81,066 6,05 24,791 23,292 Stiffeenth 5 per cent 13,63,527 82,461 12,81,066 6,05 24,791 23,293 Stiffeenth 5 per cent 14,80,5237 14,1363 15,53,714 7,81 30,641 29,206 Stiffeenth 5 per cent 14,80,5237 1,01,23237 9,89 36,613 23,235 Stiffeenth 5 per cent 14,80,5237 1,11,563 15,53,714 7,81 26,916 Stiffeenth	Seventh 5 per cent	8,14,588	13,762	8,00,826	1.69	14,810	14,560	250
Ninth 5 per cent 9.09,696 22.227 8,86,469 2.45 16,531 16,117 Tenth 5 per cent 9.73,674 30,001 9,43,673 3.63 13,703 17,157 Tenth 5 per cent 10,62,909 38,556 10,24,353 3.63 19,325 18,624 Teventh 5 per cent 11,31,319 49,609 10,84,710 4.29 20,605 19,722 Thirteenth 5 per cent 11,31,312 64,338 11,42,994 5.16 21,506 19,722 Thirteenth 5 per cent 12,47,322 64,338 11,62,994 5.16 21,509 19,722 Fifteenth 5 per cent 13,65,527 10,04,710 4.29 20,616 21,509 Stateenth 5 per cent 14,80,529 1,00,502 13,80,027 6,19 21,509 Stateenth 5 per cent 14,80,529 1,01,593 15,53,714 7,81 30,611 29,249 Stateenth 5 per cent 20,0218 3,01,271 22,00,747 18,25,237 37,49 25,591 37,196 21,709 Stateenth 5 per cent 24,96,263 10,1,211 29,21,994 10	ŝ	8, 55, 285	18,422	8, 36, 863	2.15	15,550	15,215	335
Tench 5 per cent 9,73,674 30,001 9,43,673 3,63 19,723 19,624 Eleventh 5 per cent 10,62,909 38,556 10,24,353 3,63 19,325 19,624 Tweiveth 5 per cent 11,33,319 48,609 10,64,710 4,29 20,605 19,722 Thirteenth 5 per cent 12,47,322 64,338 11,62,984 5,16 22,676 21,506 Fourteenth 5 per cent 13,63,527 82,461 12,01,066 6,03 24,791 23,322 Sifteenth 5 per cent 14,80,529 1,00,502 13,80,027 6,79 26,918 25,091 Sixteenth 5 per cent 14,80,529 1,00,502 13,80,027 6,79 26,918 25,091 Sixteenth 5 per cent 16,85,297 1,31,583 15,53,714 7,81 30,641 28,246 Sixteenth 5 per cent 20,25,641 2,00,404 18,25,237 9,89 36,829 33,166 Eighteenth 5 per cent 20,25,641 2,00,404 18,25,237 9,89 36,829 33,166 Eighteenth 5 per cent 20,25,641 2,00,404 18,25,237 9,89 36,829 33,166 Sixteenth 5 per cent 20,25,641 3,00,371 12,00 45,636 40,159 Nineteenth 5 per cent (f_{1}) 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,994 7 Top 5 per cent (f_{1}) 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,994 7 Top 5 per cent (f_{1}) 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,994 7 Top 5 per cent (f_{1}) 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,994 7 Top 5 per cent (f_{1}) 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,994 7 Top 5 per cent (f_{1}) 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,994 7 Top 5 per cent (f_{1}) 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,994 7 Top 5 per cent (f_{1}) 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,994 7 Top 6 1 Ledgera.	ហ	9,08,696	22,227	8, 86, 469	2. 45	16,521	16,117	404
Eleventh 5 per cent $10,62,909$ $38,556$ $10,24,333$ 3.63 $19,325$ $18,624$ Tweivth 5 per cent $11,31,319$ $48,609$ $10,84,710$ 4.29 $20,605$ $19,722$ Thirteenth 5 per cent $12,47,322$ $64,338$ $11,82,994$ 5.16 $22,676$ $21,508$ Furtheenth 5 per cent $13,63,527$ $82,461$ $12,81,066$ $6,05$ $24,791$ $23,292$ Pifteenth 5 per cent $13,63,527$ $82,461$ $12,81,066$ $6,05$ $24,791$ $23,292$ Pifteenth 5 per cent $14,80,529$ $1,00,502$ $13,1583$ $15,53,714$ $7,81$ $30,641$ $28,249$ Stateenth 5 per cent $20,25,641$ $2,00,404$ $18,25,237$ $9,899$ $35,636$ $40,159$ Stighteenth 5 per cent $20,25,641$ $2,00,404$ $18,25,237$ $9,899$ $56,829$ $31,157$ 1 $20,641$ $28,249$ Kighteenth 5 per cent $20,25,641$ $2,01,211$ $22,006,747$ $12,200$ $45,656$ $53,127$ 1 Cop 5 5 per cent $1,05,92,614$		9,73,674	30, 001	9,43,673		17,703	17,157	545
Tweivth 5 per cent 11,33,319 48,609 10,04,710 4.29 20,605 19,722 Thirteenth 5 per cent 12,47,322 64,338 11,82,984 5.16 22,679 21,508 Fourteenth 5 per cent 13,63,527 82,461 12,81,066 6,05 24,791 23,292 Futteenth 5 per cent 14,80,529 1,00,502 13,80,027 6,19 26,918 25,091 Fifteenth 5 per cent 14,80,529 1,00,502 13,80,027 6,05 24,99 25,918 25,091 Sixteenth 5 per cent 16,65,297 1,31,593 15,53,714 7,81 30,641 29,249 Sixteenth 5 per cent 20,25,641 2,00,404 19,25,237 9,89 36,629 33,186 Sighteenth 5 per cent 20,25,641 2,00,404 19,25,231 9,89 36,632 33,186 Nineteenth 5 per cent 25,10,018 3,01,271 22,09,747 12,00 45,636 53,127 1 Top 5 per cent 34,90,085 5,68,101 29,21994 16,22,593 1,20,984 7,09 Top 5 per cent (y) <td>Eleventh 5 per cent</td> <td>10,62,909</td> <td>38, 556</td> <td>10, 24, 353</td> <td>1</td> <td>19, 325</td> <td>18,624</td> <td>701</td>	Eleventh 5 per cent	10,62,909	38, 556	10, 24, 353	1	19, 325	18,624	701
Thirteenth 5 per cent12,47,32264.33811,82,9845.1622,67621,508Fourteenth 5 per cent13,63,52782,46112,81,0666,0524,79123,292Pifteenth 5 per cent14,80,5291,00,50213,80,0276,7926,91825,091Sixteenth 5 per cent14,80,5291,00,50213,80,0276,7926,91825,091Sixteenth 5 per cent16,85,2971,31,59315,53,7147,8130,64128,249Sixteenth 5 per cent20,25,6412,00,40418,25,2379.8936,67933,106Eighteenth 5 per cent20,25,6412,00,40418,25,2379.8936,67933,106Nineteenth 5 per cent21,91222,08,74712.0045,53640,159Nineteenth 5 per cent34,90,0855,68,10129,21,98416.2253,1271Top 5 per cent1,06,92,61439,38,48266,54,13237,1181,92,5931,20,9947Total1,06,92,61439,38,48266,54,13237,1181,92,5931,20,9947Total3,41,33,18156,01,0922,85,32,06916,41Source 1 Ledgere.3,41,33,18156,01,0922,85,32,06916,41	Twelvth 5 per cent		48, 609	10,84,710	4,29	20,605	19 <i>°</i> 722	683
Fourteenth 5 per cent $13,63,27$ $82,461$ $12,81,066$ $6,05$ $24,791$ $23,292$ Piffeenth 5 per cent $14,80,529$ $1,00,502$ $13,80,027$ $6,79$ $26,918$ $25,091$ Sixteenth 5 per cent $16,85,297$ $1,31,583$ $15,53,714$ $7,81$ $30,641$ $29,249$ Sixteenth 5 per cent $20,25,641$ $2,00,404$ $18,25,237$ $9,89$ $36,829$ $31,186$ Edghteenth 5 per cent $20,25,641$ $2,00,404$ $18,25,237$ $9,89$ $36,829$ $31,186$ Nineteenth 5 per cent $20,25,641$ $2,00,404$ $18,25,237$ $9,89$ $36,829$ $31,186$ Nineteenth 5 per cent $20,25,641$ $2,00,404$ $18,25,237$ $9,89$ $36,829$ $31,186$ Nineteenth 5 per cent $24,90,085$ $5,58,101$ $29,21,994$ $1,20,094$ $1,20,984$ 7 Top 5 per cent $1,06,92,614$ $39,38,492$ $66,54,132$ $37,18$ $1,92,593$ $1,20,984$ 7 Total $1,06,92,614$ $39,38,492$ $66,54,132$ $37,18$ $1,92,593$ $1,20,984$ 7 Total $3,41,33,181$ $56,01,092$ $2,85,32,009$ $16,41$ $ -$ Source 1 Ledgera. $3,41,33,181$ $56,01,092$ $2,85,32,009$ $16,41$ $ -$	Thirteenth 5 per cent	12,47,	64,338	11,82,984	5.16	22,678	21 , 50 8	1, 169
Fifteenth 5 per cent 14,80,529 1,00,502 13,80,027 6.79 26,918 25,091 Sixteenth 5 per cent 16,85,297 1,31,583 15,53,714 7,81 30,641 28,249 Sixteenth 5 per cent 16,85,297 1,31,583 15,53,714 7,81 30,641 28,249 Seventeenth 5 per cent 20,25,641 2,00,404 18,25,237 9,89 36,829 33,186 Eighteenth 5 per cent 20,25,641 3,01,271 22,08,747 12,00 45,636 40,159 Nineteenth 5 per cent 34,90,085 5,68,101 29,21,984 16,28 63,456 53,127 1 Top 5 per cent 1,05,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,984 7 Total 1,05,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,984 7 Total 3,41,33181 56,01,092 2,85,332,009 16,41 - - - Source 1 Ledgers. 1 Ledgers. 1,41,33,181 56,01,092 2,85,332,009 16,41 - - - -	Fourteenth 5 per cent	13,63,	82,461	12,81,066	6,05	24, 791	23, 292	1,499
Sixteenth 5 per cent 16, 65, 297 1, 31, 583 15, 53, 714 7.81 30, 641 28, 249 Seventeenth 5 per cent 20, 25, 641 2,00, 404 18, 25, 237 9, 89 36, 829 33, 186 Eighteenth 5 per cent 20, 25, 641 2,00, 404 18, 25, 237 9, 89 36, 829 33, 186 Nineteenth 5 per cent 25, 10, 018 3, 01, 271 22, 08, 747 12, 00 45, 636 40, 159 Nineteenth 5 per cent 34, 90, 085 5, 68, 101 29, 21, 984 16, 28 63, 456 53, 127 1 Top 5 per cent 1, 05, 92, 614 39, 386, 482 66, 54, 132 37, 18 1, 92, 593 1, 20, 984 7 Total 1, 05, 92, 614 39, 386, 482 66, 54, 132 37, 18 1, 92, 593 1, 20, 984 7 Total 3, 41, 33, 181 56, 01, 092 2, 85, 32, 069 16, 41 - - - - Source 1 Ledgers. 1, 41, 31, 181 56, 01, 092 2, 85, 32, 069 16, 41 - - - - - - - - - - <td< td=""><td></td><td>14,80,</td><td>1,00,502</td><td>13,80,027</td><td>6, 79</td><td>26,918</td><td>25, 091</td><td>1,827</td></td<>		14,80,	1,00,502	13,80,027	6, 79	26,918	25, 091	1,827
Seventeenth 5 per cent 20,25,641 2,00,404 18,25,237 9.89 36,829 33,166 Eighteenth 5 per cent 25,10,018 3,01,271 22,08,747 12,00 45,636 40,159 Nineteenth 5 per cent 34,90,085 5,68,101 29,21,984 16.28 63,456 53,127 1 Top 5 per cent 34,90,085 5,68,101 29,21,984 16.28 63,456 53,127 1 Top 5 per cent 1,05,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,984 7 Total 1,05,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,984 7 Total 3,41,33,181 56,01,092 2,85,32,089 16,41 - - - Source 1 Ledgere. <td< td=""><td>Sixteenth 5 per cent</td><td>16,85,</td><td>1, 31, 583</td><td>15,53,714</td><td>7.81</td><td>30,641</td><td>28, 249</td><td>2,392</td></td<>	Sixteenth 5 per cent	16,85,	1, 31, 583	15,53,714	7.81	30,641	28, 249	2,392
Elghteenth 5 per cent 25,10,018 3,01,271 22,08,747 12,00 45,636 40,159 Nineteenth 5 per cent 34,90,085 5,68,101 29,21,984 16.28 63,456 53,127 1 Top 5 per cent 34,90,085 5,68,101 29,21,984 16.28 63,456 53,127 1 Top 5 per cent 1,06,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,984 7 Total 3,41,33,181 56,01,092 2,85,32,089 16,41 - - - - Source 1 Ledgere. 3,41,33,181 56,01,092 2,85,32,089 16,41 - - - -	Seventeenth 5 per cen	20, 25,	2,00,404	18, 25, 237	6 8°6	36, 829	33,186	27643
Nineteenth 5 per cent 34,90,085 5,58,101 29,21,984 16.28 63,456 53,127 Top 5 per cent 1,05,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,984 Top 5 per cent 1,1 1,05,92,614 39,38,482 66,54,132 37,18 1,92,593 1,20,984 Total 3,41,33,181 56,01,092 2,85,32,069 16,41 - - Source : Ledgers. V 1,111,1 V 1,111,1 - -		25,10,	3,01,271	22,08,747	12.00	45,636	40,159	5,477
Top 5 per cent (1) 1,05,92,614 39,38,482 66,54,132 37.18 1,92,593 1,20,984 Total 3,41,33,181 56,01,092 2,85,32,069 16.41 - - Source i Ledgers. 0,10,10 2,05,32,069 16.41 - - -		34,90,	5,68,101	29,21,984	 16.28	63, 456	53, 127	10, 329
Total 3,41,33,181 . 56,01,092 2,85,32,089 16.41	5 per cent	1,0 5 ,92,	39, 38, 482	66,54,132	37,18	1,92,593	1,20,984	71,608
Source I Ledgera.		3,41,33,181	. 56,01,092	2,85,32,069	16.41			•
	•			23 0				

-

{]

In conclusion, it may be stated that the progressive income tax structure is an important fiscal instrument for raising public revenue as well as for mitigating the inequalities in income distribution. This tax has been so important for these purposes simply because of its progression. But in the countries where incomes from all sources are not brought inside the income tax net, its efficacy in reducing

the inequalities is greatly impaired.

162

j

١