

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

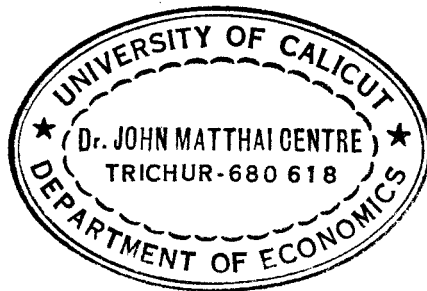
**Dr. U.T. Damayanthi**  
Professor in Economics

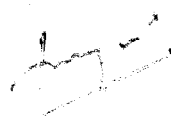
Department of Economics,  
University of Calicut,  
Dr. John Matthai Centre,  
Aranattukara,  
Thrissur – 680 618

## CERTIFICATE

Certified that this written account on ‘**Agricultural Taxation in Kerala: A Study of the Performance and Cost Effectiveness**’, submitted for the award of the degree of Doctor of Philosophy of the University of Calicut is a bonafide record of research work done by Sri. Johnson Thomas, under my supervision. No part of this has been submitted earlier for any other purposes.

Thrissur,  
05.11.2004



  
Dr. U.T. Damayanthi  
(Supervising Teacher)  
UNIVERSITY OF CALICUT

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

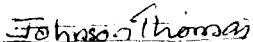
**November 2004**

## DECLARATION

I, Johnson Thomas, do hereby declare that this written account titled '**Agricultural Taxation in Kerala: A Study of the Performance and Cost Effectiveness**' is a bonafide record of research work done by me under the guidance of Dr. U.T. Damayanthi, Professor in Economics, University of Calicut.

I also declare that this has not been submitted by me earlier for the award of any degree, diploma, title or recognition.

Thrissur,  
05.11.2004

  
Johnson Thomas

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## **ACKNOWLEDGEMENT**

*May I take this opportunity to express my gratitude and thanks to one and all, who have helped me a lot in this effort. First and foremost is my Guide Prof. Dr. U.T. Damayanthi. Right from the beginning, when the research proposal was made, she encouraged, intervened and corrected so that I have come to this stage of the work; thank you teacher, thank you very much.*

*I express my thanks to Prof. Dr. K.R. Lakshmi Devi, Head, Department of Economics, Dr. John Matthai Centre, University of Calicut. I also thank Prof. K.P.Mani, Department of Cooperation and Banking, Kerala Agricultural University for having read the entire dissertation more than once and pointed out the required corrections. Prof. Dr. D.P. Nair, former Head of the Department of Economics, Dr. John Matthai Centre, University of Calicut was instrumental in getting me registered as a part time research scholar. I express my sincere thanks to him. All other teachers in the Department of Economics were also of much help to me, because they were available and could be consulted whenever required. I thank the administrative staff of the Dept. of Economics, Dr. John Matthai Centre for their sincere help.*

*Younger Research Scholars in the Department, Mr. T.D. Simon and Miss. M. Sindhu also had helped me a lot in the computation and analysis. Mr. Simon is the one who did everything connected with computer; sincere thanks to both of them not only for the help but also for the friendship, which they extended to me.*

*It was my friend Mr. C.P.James, who compelled me to get registered as a part time research scholar and it was he who took me to Dr John Matthai Centre for consultations with the Head and other teachers. I express my gratitude to him.*

*Management of St. Aloysius College Elthuruth was of great help to me. I express my thanks to Fr.Dr. Jose Pellissery, Former Principal, Rev. Fr. Pauly Thazhathu, the Manager and Fr.Thomas Chakramakkal, the Principal for the encouragement and support that they extended to me. I also remember with love and respect late Rev. Fr. Antony Thattil, Former Principal, St Aloysius College. He used to encourage me very much.*

*My friend Pious Kurian and my brother Sunny Thomas, who took all the pain to help me to conduct the family survey, also deserve special mention. The Principals of St Thomas Higher Secondary School, Pala, St Mary's H.S.S. Pala, St Augustine's H.S.S. Ramapruam, St Antony's H.S.S., Plassanal, St John's N.H.S.S. Kozhuvanal, Holy Cross H.S.S. Cherpumkal, St Sebastian's H.S.S. Koodaranji, Sacred Heart H.S.S. Thiruvampady and Teachers Ms. Maria Shaji, Sudheesh, Santhosh Augustine, Reji Mathew, Nimmy and Shiby Joseph also had helped me a lot in conducting the family survey. All of them are remembered with gratitude.*

*Mr. C.K.Sivaraman, Manager, Deputy Commissioner's Office (Sales Tax), Palghat and Ms. Lalitha Sivaraman, Sales Tax Officer introduced me to many officers in the Department of Agricultural Income Tax. This helped me a lot in the data collection from the offices. I thank Mr. V. Somasekharan, IAS, Commissioner of Taxation for permitting me to visit and collect data on Agricultural Income Tax from offices all over the state.*

*Mr John Thomas of Rubber Board, Kottayam, Mr. Nareshkumar of NABARD, Trivandrum and Mr. Sabu of Spices Board were very much helpful in collecting data.*

*Librarians of Dr. John Matthai Centre, KILA, Spices Board Kochi, College of Co-operation and Banking, Vellanikkara, Department of Horticulture, Vellanikkara, Kerala Agricultural University, Thrissur, CDS, Legislative Assembly Thiruvananthapuram also had helped me much. I thank Mr. Pauly Manjaly of M/s. Educare Infotech, Thrissur for the beautiful printing works.*

*Prof. C.V.Joseph, Former Head of the Department of Economics of St. Aloysius College also is mentioned with deep sense of love and gratitude. I owe much to all my friends in the Department of Economics, St. Aloysius College, Elthuruth.*

*There are some others whose sacrifices nourish every inch of my movement forward. But I do not express my feeling towards them because I want it to be with me always.*

**Johnson Thomas**

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

# CONTENTS

	Page
Acknowledgement	
List of Tables	
List of Figures	
Glossary	
Chapter	
I. Introduction	1
II Review of Literature on Agricultural Taxation	15
III Structure of Revenue of Government of Kerala	47
IV Performance of Agricultural Taxes in Kerala	70
V Tax Burden of Agricultural Sector in Relation to its Taxable Capacity	101
VI Effectiveness of the Administrative System for Agricultural Taxes	141
VII The Impact of the Introduction of Compounding in Agricultural Income Tax on Taxation of Agricultural Sector	172
VIII Summary, Conclusions and Policy Implications	204
Select Bibliography	219
Appendices	

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## LIST OF TABLES

Table No.	Title	Page No.
2.1	Standardisation of Land Holding	42
3.1	Composition of Total Revenue	49
3.2	Sources of Total Revenue (Percentages)	50
3.3	Composition of Total Revenue –A detailed Picture (Percentages)	50
3.4	Composition of States' Own Revenue	52
3.5	Composition of Total Tax Revenue	53
3.6	Individual Taxes as Percentage of States Own Tax Revenue	54
3.7	Ranks of Individual Taxes	56
3.8	Compound Growth Rate in Each Decade	57
3.9	Growth Rate of Ten Year Totals over Previous Ten Year Totals	58
3.10	Ratio of Total Revenue, Total Tax, State Tax and Agricultural Taxes to NSDP and AGT to AAI	59
3.11	Elasticity of the Tax System	61
3.12	Per Capita Tax of Different States (Rs.)	62
3.13	State Tax Income Ratio (Percentages)	63
3.14	State's Own Tax Revenue of Different States as Percentage of Total Revenue	64
3.15	Central Taxes to Different States as Percentage of Their Total Revenue	65
3.16	State's Own Taxes of Different States as Percentage of their Total Tax	66
3.17	Central Taxes of Different States as Percentage of their Total Tax	66
3.18	Elasticity of State's Own Taxes in Relation to NSDP	67
4.1	Compound growth of AIT and AAI	76
4.2	Per Cultivator AIT	77

<b>Table No.</b>	<b>Title</b>	<b>Page No.</b>
4.3	Ratio of AIT to AAI	78
4.4	Ratio of AIT to Various Revenue Concepts	79
4.5	Elasticity of AIT to AAI	80
4.6	Regression model showing the influence of AAI on AIT	81
4.7	Regression model explaining the influence of AAI and Net cropped area on AI	82
4.8	Regression model showing the influence of AAI, NSDP and Net cropped area on Agricultural income tax	82
4.9	Regression model showing the influence of Agricultural income tax on STX	83
4.10	Regression model showing the influence of Agricultural income tax on TTX	84
4.11	Regression model showing the influence of Agricultural income tax on TR	84
4.12	Compound Growth rate of Land tax	86
4.13	Per holding and Per hectare Land tax in Kerala. (Rs)	87
4.14	Ratio of Land tax to AAI	88
4.15	Ratio of Land Tax to Various Revenue Concepts	88
4.16	Elasticity of Land tax to AAI	89
4.17	Compound Growth rate of AGT	90
4.18	Per cultivator AGT (Rs.)	91
4.19	Ratio of Per cultivator AGT to Per cultivator AI	92
4.20	Ratio of Agricultural Taxes	92
4.21	Comparison of ratio of AGT to AAI with ratios of TR, TTX, STX and OR to NSDP	93
4.22	Elasticity of AGT to AAI	94

<b>Table No.</b>	<b>Title</b>	<b>Page No.</b>
4.23	Direct Taxes on Agriculture as Percentage of Total revenue of Selected States	97
4.24	Direct Taxes of Agriculture Sector as Percentage of Total Tax Revenue	98
4.25	Direct Taxes on Agriculture as percentage of State's own Tax Revenue	99
4.26	Direct Taxes on Agriculture as Percentage of Agriculture Income	99
5.1	Taxes Paid by Agriculturists Having Different Area of Holdings	106
5.2	Tax Income Ratio of Rubber Cultivator Having 1 hectare of Cultivation	108
5.3	Tax Income Ratio of Coconut Cultivator Having 1 hectare of Cultivation	111
5.4	Tax Income Ratio of Tea Cultivator Having 1 hectare of Cultivation	112
5.5	Tax Income Ratio of Coffee Cultivator Having 1 hectare of Cultivation	113
5.6	Tax Income Ratio of Cardamom Cultivator Having 1 hectare of Cultivation	114
5.7	Tax Income Ratio of Cashew Cultivator Having 1 hectare of Cultivation	116
5.8	Tax Income Ratio of Pepper Cultivator Having 1 hectare of Cultivation	117
5.9	Inter Crop Comparison of Tax Burden	119
5.10	Ownership Pattern of Land	122
5.11	Distribution of Top Twenty Families with Highest Capacity Index	126
5.12	Consumer Articles Possessed by Top 19 Agricultural Families	131
5.13	Asset Position and Expenditure Pattern of Top 19 Agricultural Families	132

<b>Table No.</b>	<b>Title</b>	<b>Page No.</b>
5.14	Type of Education and Education Loan in the Top 19 Agricultural Families	132
5.15	Possession of Selected Consumer Durables by Different Families	133
5.16	Tax Income Ratio of Cultivators of Different Crops and Salaried Man	137
5.17	Tax-Income Ratio of Different Cultivators of Different Crops as Percentage of the Tax Income Ratio of the Salaried People at Different Levels of Income	138
6.1	Cost as Percentage of Gross Tax Collected	153
6.2	Different Costs of Collection in Different Countries for Different Taxes	155
6.3	Cost of Collection of Sales Tax as Percentage of Gross Collection	158
6.4	Change in the Number of Tax Payers	160
6.5	Change in the Number of Assesseees	161
6.6	Arrear at Various Stages of Action in Agricultural Income Tax Offices that deal with Individual assesseees	163
6.7	Arrear at various stages in Assistant commissioners office	164
6.8	Staff Strength	167
6.9	Composition of Total Administrative Cost in Various Offices	169
7.1	Compounding Rates of Tax	179
7.2	New Rates of Agricultural Income Tax from 1999	181
7.3	Compound Growth Rate of AIT	184
7.4	Per Cultivator Agricultural Income Tax	185
7.5	Share of Agricultural Income Tax in State Revenue in the Nineties	185
7.6	Average Share of Agricultural Income Tax	187
7.7	Ratio of Agricultural Income Tax to AAI	187

<b>Table No.</b>	<b>Title</b>	<b>Page No.</b>
7.8	Elasticity of AIT to AAI	189
7.9	Average Elasticity	189
7.10	Compound Growth Rate	190
7.11	Regression model showing the influence of AAI on AIT	191
7.12	Regression model comparing the influence of AAI and Net cropped area on Agricultural income tax in Eighties and Nineties	191
7.13	Regression model comparing the influence of Net cropped area on Agricultural income tax in the Eighties and Nineties	191
7.14	Regression model comparing the influence of Agricultural income tax on STX in the Eighties and Nineties	192
7.15	Regression model comparing the influence of Agricultural income tax on TTX in the Eighties and Nineties	192
7.16	Regression model comparing the influence of Agricultural income tax on TR in the Eighties and Nineties	193
7.17	Price Index and Agricultural Income Tax	194
7.18	Cost of Cultivation	196
7.19	Terms of Trade of the Agricultural Sector	197
7.20	Change in the Size and Pattern of Holdings in Kerala	201
7.21	Size of Holdings of the Sample Families	202

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## LIST OF FIGURES

<b>Fig. No.</b>	<b>Title</b>	<b>Page No.</b>
3.1	Composition of Total Revenue: Central and State Shares - 2000-2001	52
3.2	Composition of State's Own Tax Revenue	56
3.3	Growth Rates over the Decades	58
4.1	Comparison of the Growth Rates of AIT and AAI over Decades	76
4.2	Variation of the Ratio of AIT to Various Revenue Variables over the Years	80
4.3	Ratios of Revenue Variables to NSDP and AGT to AAI: 2000-01	94
5.1	Sample Design	121

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## Glossary

**Adjusted agricultural income (AAI):** is the income derived from the cultivation of land alone. It is estimated by deducting income from allied activities such as fishing, forestry, animal husbandry, mining and quarrying from total agricultural income. In other words it does not include income from allied activities of agricultural sector.

**Administrative Cost:** Refers to the cost incurred on personnel and equipment required for the assessment and collection of taxes.

**Agricultural Holding Tax (AHT):** This is a recommendation of Dr. Raj Committee for assessment of agricultural income on the basis of the ownership of land, its productivity, price of the crop cultivated and soon. The rate of AHT was  $x/2$  per cent where x is the rateable value.

**Agricultural Income Tax:** Agricultural income tax is a tax supposed to be paid by the agriculturists who owns more than 3 hectares of land. The tax varies with the type of crop and the area of land owned by the landlord. Now there is tax holiday.

**Capacity Index:** It is a composite index worked out by giving weightage to the various consumer durables owned by a household, educational level of the children, asset holding like gold, houses, vehicles, expenditure on telephone and current bill and amount of loan availed.

**Central Non Tax revenue (CNTR):** is the Central aid given to the state. It is the central non tax resources allotted to the state.

**Compliance Cost:** Means the time and troubles earned to the general body of taxpayer and their advisors. It refers to the cost incurred by the individuals in maintaining proper accounts keeping/paying tax practitioners time used to fill the relevant form or try to think ways of filing them which are least disadvantageous to themselves.

**Compounding of Agricultural Income for Agricultural Income Tax:** This is the process of calculating the agricultural income tax of a cultivator on the basis of the

area of land cultivated and crop of cultivation. Here, income from cultivation is not actually estimated /measured but is assumed that a particular cultivator with a particular crop in certain area of land will have a certain taxable capacity and is supposed to pay agricultural income tax at the minimum rate fixed by the state government.

**Direct Agricultural Taxes (AGT):** are the sum total of all the land based direct taxes imposed on the agricultural sector. In the case of Kerala it is the sum of Land revenue and Agricultural Income Tax at present.

**Efficiency Cost:** It is the distortion caused to the economy as a result of a tax. This is also referred to the dead weight loss, or excess burden.

**Elasticity of the Tax System:** refers to the responsiveness of the Total tax revenue (TTX) and state's own tax revenue (STX) to the Net Domestic Product and responsiveness of direct taxes of agricultural sector (AGT) to the adjusted agricultural income (AAI).

**Land Revenue LR:** is also called land tax. This the basic tax. It is imposed on the land on the basis of the area of land owned by the landowner.

**Operating Cost:** Operating cost of the tax is the sum total of administrative and compliance cost.

**Own Revenue: (OR)** is the revenue mobilized by the state government. So it is the sum of state's own tax revenue (STX) and non-tax revenue mobilized by the state (SNTR). Or it is the total revenue (TR) minus the sum of central taxes (CETX) to the state and central grants to the state (CNTR).

**Social Cost:** It constitutes the mental and emotional strain associated with tax evasion. It also includes the real cost of concealing income or sales (tax base) from tax authorities. This cost has two aspects (i) the amount spent by individuals for evading taxes such as bribes and (ii) loss in the government revenue.

**State's non tax Revenue (SNTR):** is the non tax revenue mobilised by the state government.

**State' Own Tax (STX):** is the tax mobilised by the state government.

**Total non-tax revenue (TNTR):** includes non-tax revenue mobilized by the state government (SNTR) from various sources such as forests, social and economic services etc. and central aid (CNTR).

**Total revenue (TR):** refers to the total revenue of the state from various tax and non-tax sources.

**Total tax revenue (TTX):** of a state comprises of the tax revenue mobilized by the state government (STX) and tax revenue pooled to the state from the central taxes (CETX).

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

# CHAPTER I INTRODUCTION

## 1.1 Introduction

The 'ever increasing activity' of the 'welfare state' compels every government to make all-out efforts for resource mobilization. The two important sources of revenue are taxes and non-taxes. Share of taxes in total revenue of the governments far exceed non-taxes.

Tax is important not only as an instrument of resource mobilization but also as a strong weapon in attaining other objectives like equity in the society, correcting inflationary and deflationary tendencies in the economy, promoting and steadying employment<sup>1</sup>, etc. Thus, taxation has manifold roles to play and a good tax system is essential for every economy. A good tax system must have some basic qualities<sup>2</sup>.

Developing countries, in the initial stages of their development, have the scarcity of sufficient resources and generally their tax systems are beset with many infirmities. India is facing this problem and despite the best efforts, the central government is finding it difficult to keep the fiscal deficit below 5 per cent of the Gross Domestic Product.

---

<sup>1</sup> H Dalton, *Principles of Public Finance*, (New Delhi: Allied Publishers Pvt.Ltd., 1978), p.115.

<sup>2</sup> Musgrave summarises the requirements for a good tax structure as: (i) Revenue yield should be adequate, (ii) The distribution of the tax burden should be equitable, i.e., everyone should be made to pay his or her fair share, (iii) Taxes should minimise interference with economic decisions in otherwise efficient markets, (iv) The tax structure should facilitate the use of fiscal policy for stabilisation and growth objectives, (v) The tax system should permit fair and non-arbitrary administration and it should be understandable to the tax payer, (vi) Administration and compliance cost should be as low as is compatible with other objectives, etc. (Richard A. Musgrave and Peggy B. Musgrave, *Principles of Public Finance*, (New Delhi: Allied Publishers Pvt. Ltd., 1978), p.118.

Kerala is going through a critical stage of its development. The doubt about the economic sustainability of its world acclaimed<sup>3</sup> development pattern (the so called Kerala Model)<sup>4</sup> is gaining ground. Resource crunch is a major problem the state economy is facing. Paucity of fund is a major hazard in the quality of education, including medical education<sup>5</sup>.

Resource crunch has compelled this ideologically committed state to think differently on many social issues such as self financing educational institutions, public sector restructuring, salary and pension benefits of the state government employees, private initiative in public utilities such as roads, bridges etc. The present government had to bring out a “White Paper on State finance”<sup>6</sup> to high light the major areas of financial concerns of the state .The paper identifies 12 dimensions of the crisis involving about Rs. 4616.78/- crores.

Fiscal deficits and revenue deficits are alarmingly high and are on the increase. Fiscal deficit is a measure of the amount that a state government has to borrow to meet its total expenditure. The fiscal deficit is as high as 5.49 per cent of the Gross State Domestic Product (GSDP)<sup>7</sup>. The present Government has identified sustainable fiscal deficit to be around 3.5 per cent to 4 per cent of the

---

<sup>3</sup>A.K.Sen, and Jean Dre'ze , *Indian development and participation*, (Oxford University Press,2002),p.97. and V.K. Ramachandran, “On Kerala’s Development Achievements” in *Indian Development Selected Regional Perspective*,ed. Jean Dre’ze and Amartya Sen (Oxford University Press,1997), pp205-356.

<sup>4</sup> Most important feature of Kerala model of development is the high social development with low economic development.

<sup>5</sup> For a detailed discussion on the related issues see P.D.Jeromi “What Ails Kerala Economy? A Sectoral Exploration”, *Economic Development in India*, Academic Foundation ,New Delhi, Series Editors Raj kapila and Uma Kapila,(2003), pp-87-148. Richard W. Frank, and, Barbara H Chasin “is the Kerala model Sustainable ?Lessons from the Past: Prospects to the Future”, in *Kerala’s Development Experience*, ed. M A Oommen Vol.1,( New Delhi: Concept publishing company, 1999) and K.K.George, *Limits to Kerala model of Development* ,(Thiruvananthapuram: C.D.S., 1999).

<sup>6</sup> Government of Kerala, *White Paper on State Finances*, ( TVM: Govt. Press, June 2001)

<sup>7</sup> Economic Review, 2003 ( Trivandrum: Kerala State Planning Board, 2003),P.16.

GSDP and the actual amount should be between Rs.3200/- crores and Rs.3500/- crores.<sup>8</sup> But the government failed to bring down it to the desired level.

Increase in revenue deficit is a more worrisome aspect of the budget. This means that government has to borrow to finance even the day today expenses of administration; there by ruling out the possibility of any surplus for reinvestment or taking up any new projects in this high literate state where educated unemployment is a serious problem.

Similar is the case with the indebtedness of the state. Total debt of Kerala state shows a continuous increase from Rs.217.34/- crores in 1970-71 to a total of Rs.31060/- crores in 2002-03<sup>9</sup>. The increase is alarming and is about 37.5 per cent of the Net Domestic Product in 2000-01. The behaviour of per capita debt outstanding also is similar. It was Rs.102/- in 1970-71 and skyrocketed to Rs.9425/- in 2002-03. This is in contrast to the all states average of Rs.6652/- in 2002-03<sup>10</sup>. The state is moving fast to a debt trap.

All these point to one important fact that there should be an all out effort for additional resource mobilization. Agriculture is a dominant sector of the economy and taxation of this sector should attract our special attention to see whether there is scope for increased mobilization of resources from the sector.

Agriculture, all over the world, used to contribute considerably to the government resources. For example in Argentina agricultural sector contributed about 15 per cent of Gross Domestic Product to the total revenue of the Government and this came about 40 per cent of the total tax revenue in 1977.<sup>11</sup> In

---

<sup>8</sup> White paper, Op. Cit., p.101.

<sup>9</sup> Economic Review, 2003, Op. Cit., p.16.

<sup>10</sup> Various issues of Budget in Brief, Government of Kerala.

<sup>11</sup> Skinner, Jonathan, "Prospects for Agricultural Land Taxation in Developing countries", in *Tax policy in Developing countries*. ed. by Javad Khalilzadesh-shirazi Anwar shah, A World Bank Symposium, (Washington ,D.C: The World Bank ,1991), p.139.

Uruguay in 1973-74 about 43 per cent of gross agricultural income was taken away in direct taxes on agriculture.<sup>12</sup> Indian land tax had brought in more than two-third of all government revenue in the eighteenth century and one-third in the first part of the 20th century.<sup>13</sup>

Agricultural sector in Kerala is undergoing tremendous changes, which have their impact on the taxable capacity of the sector.

Government expenditure for the agricultural sector through five year plans have increased considerably. There is an increase from Rs.249/- lakhs in the first plan to Rs.187872/- lakhs during the 9<sup>th</sup> plan (1997-2002)<sup>14</sup>. The increase in absolute amount is manifold. The share was 9.6 per cent of the total plan expenditure in the first plan and it increased to 19.46 during the 6<sup>th</sup> plan and to 11.41 per cent during the 9<sup>th</sup> plan. This shows that Five-year plans have spent a large amount on agricultural sector. This must have increased the taxable capacity of the sector and it is argued that agriculture should contribute in accordance with what it receives from the government.

Primary sector had an average growth rate of 2.3 per annum from 1980-81 onwards, till 2000-01<sup>15</sup>. Average growth rate of secondary sector was 5.1 per cent and that of tertiary sector was 5.9 per cent. Primary sector and agriculture contributed about 17.5 and 17.2 per cent of the Net Domestic Product in 2002-03. Their respective shares were 39.23 and 39 in 1980-81<sup>16</sup>.

Similarly, agriculture is still a main source of living of a major section of the population in Kerala. Agricultural sector employed about 23.27 per cent (7.2 per

---

<sup>12</sup> Ibid.,p.149

<sup>13</sup> Bird, Richard M, *Taxing Agricultural land in Developing countries*, (Cambridge, Mass: Harvard Uni. Press, 1974).

<sup>14</sup> Government of Kerala, *Budget in Brief 2003-04*,p.c-1 and *Statistics for Planning 2001*, (Trivandrum: Directorate of Economics and Statistics,2001),pp.524-527.

<sup>15</sup> Various issues of *Economic Review*.

<sup>16</sup> *Economic Review 2003*, Op. Cit., p.24

cent cultivators and 16.07 per cent Agricultural labours) of the total workers in 2001. In 1961 agriculture employed about 54.6 per cent of the work force (cultivators-29.84 per cent and Agricultural labours-24.8 per cent). In addition to this, there are the people employed in fishing, forestry, mining and quarrying, etc.

As per the Agricultural Census conducted by Directorate of Economics and Statistics<sup>17</sup>, number of holdings increased. The average size of holding decreased to 0.27 hectares in 1995-96 from 0.36 hectares in 1985-86. Number of small and marginal farmers (below 2 hectares) increased. The number of medium and large farmers (4 hectares and above) fell. The area held by them decreased. There fore the average size of holding of the medium and large framers came down from 10.56 hectares to 9.41 hectares.

Fall in the average size of holdings, increase in the number and area held by the marginal and small holders, fall in the number and area held by the medium and large holders are indications of a decreasing taxable capacity in the agricultural sector.

Another aspect of agricultural scenario of Kerala is the changing cropping pattern. Cropping pattern has undergone a tremendous change. In 1960-61, 45.4 per cent of the gross cropped area was used for food crops; it decreased to 15.52 per cent in 2000-01. The share of cash crops including plantation was 44.5 per cent in 1960-61 and it increased to 68.6 per cent in 2000-01. There is commercialisation of the agricultural sector and production has become increasingly market oriented, which is an indication of the increased capacity of the sector to pay more tax.

---

<sup>17</sup> Statistics for Planning 2001, Op. Cit., p.31.

## **1.2 Statement of the Problem**

Resource mobilization is essential for economic and social development. Taxation is the most important tool of resource mobilization. Every sector should be taxed fairly, in accordance with the ability to pay. A sound tax system has certain basic qualities and is necessary, as it would generate revenue and a host of other positive effects in the society and economy. Kerala economy is passing through a critical stage of its development. The state has a very difficult financial position now. Therefore, it should search for fresh sources of revenue and better utilise the existing ones.

In this context, an analysis of the agricultural taxation in Kerala becomes relevant. There are many questions like, whether the sector is taxed properly, whether there exists excess taxable capacity, whether the agricultural tax system is efficient or not, whether there is inter-sectoral and intra-sectoral equity in taxation and so on, which need concrete answers. Present study is an attempt to find out answers to some of these questions pertaining to the agricultural tax system of the state. This calls for a systematic and detailed investigation.

## **1.3 Objectives**

We propose to make a detailed study of the agricultural taxation in Kerala with the following objectives:

- (i) To analyse the revenue structure of the State Government of Kerala,
- (ii) To examine the performance of the agricultural taxation in Kerala and to compare it with other states,
- (iii) To assess the existing tax burden of the agricultural sector and to measure the taxable capacity of the sector,
- (iv) To examine the cost of collection of agricultural taxes and efficiency in tax collection, and

- (v) To analyse the impact of the introduction of compounding on agricultural income tax.

#### 1.4 Data Source and Methodology

Here, we give only a brief account of the methodology used in the study. A detailed account of the methodology will be given in each chapter together with the analysis.

Data are collected from both primary and secondary sources. Secondary data are collected from various issues of R.B.I. bulletin, Economic Review, Statistics for Planning, Economic and Political Weekly (Research Foundation), Hand book of Statistics on Indian Economy (RBI), various Census Reports, Indian Rubber Statistics 2003, Rubber and cultivation 2004, NABARD etc.

Data on Net Domestic Product and Agricultural income at Current and Constant prices (1993-94 series) are used wherever needed

The structure of the revenue of the state was examined using secondary data from 1957-58 to 2000-01. It gives the composition of total revenue, total tax revenue, own revenue, state's own tax revenue and non- tax revenue. The importance of the direct taxes of the agricultural sector in Kerala in each of the above is brought out. Conventional methods like tax-income ratio, elasticity of the tax system in relation to Net State Domestic Product (NSDP) and elasticity of the direct taxes of the agricultural sector in relation to Net State Domestic Product and Adjusted Agricultural Income<sup>18</sup> are made. The relative importance of each taxes such as sales tax in the state's own tax revenue was analysed. The interstate comparison of the structure of revenue was also done for the above period on the basis of per capita tax, tax-income ratio, share of state's own tax in total revenue,

---

<sup>18</sup> Adjusted Agricultural Income refers to income from agriculture alone that is it excludes income from fisheries, fishing and animal husbandry etc

share of state's own tax in total taxes, share of central taxes in tax revenue of the states, elasticity of the tax system etc.

Performance of the agricultural tax system of the state was examined with secondary data for the period from 1957-58 to 2000-01. Conventional methods were used to assess the performance of the taxes. Simple and multiple regressions were also done to interpret the data.

Performance of the direct taxes of the agricultural sector of the state was compared with other states like Assam, Haryana, Punjab and all major south Indian states. Comparison with Assam is done because it has many features similar to that of the agricultural sector of Kerala. In both states, there is the predominance of plantation crops and in both states agricultural income tax existed right from the constitution of the state. Comparison with Punjab and Haryana is made because these are the two Indian states where agriculture is said to have made great leap forward.

Tax burden of agriculturists is computed by estimating the tax net income ratio. Net income of the cultivator was estimated by using the data on cost, prices and productivity collected from secondary sources mentioned above. Taxes paid by the agriculturists were computed by estimating the taxes paid by the agriculturists with different size of holdings as per the existing tax laws. Tax burden of the cultivators of different crops was estimated and compared for 2003 to know the intra sectoral equity in taxation.

Taxable capacity was measured by estimating the net income of different cultivators of different crops. Taxable capacity was assessed also by conducting a family survey and constructing a Composite Capacity Index on the basis of the primary data collected through this household survey. The survey was conducted between June 15 and August 31 of 2003 in Meenachil taluk of Kottayam district and Kozhikode taluk of Kozhikode district. 1700 questionnaires were distributed,

900 in Meenachil taluk and 800 in Kozhikode taluk. These areas were selected because of the presence of large number of financially well-to-do agriculturists, cultivating different crops such as rubber, coconut and areca nut. 1308 filled in questionnaires were returned, 776 from Meenachil and 532 from Kozhikode of these 642 belonged to the agricultural families<sup>19</sup> and 666 to non-agricultural families<sup>20</sup>.

Among the non-agricultural families, there were 122 households where at least two members of the family (most often both the spouses) are employed, whom here in after referred to as 'both employed families' and 156 families where at least one of the members (most often either of the spouses) of the family is employed. Only those employed in organised sector, government, semi-government, banks, co-operative societies, and private firms, where salary is paid either through bills or cheques, are considered as employed. This is to make sure that they have accounted income and pay proper taxes. Others were classified as unorganised sector and had business, trade, driving, rubber tapping, daily labour, etc. as their main source of income.

Capacity index reflecting the standard of living, asset position, bimonthly expenditure on telephone and electricity, type of education provided to the children and amount and purpose of loan availed was constructed for 122 both employed families, 156 single employed families and 195 agriculturists families.

Of the 642 agricultural families, 195 possess a land size of 3 or more than 3 acres. Families with less than 3 acres of land fall in the category of marginal and

---

<sup>19</sup> Agricultural families are those whose only source of income is farming. They do not have any supplementary source of income such as small trade, rubber tapping, taxi driving, etc.

<sup>20</sup> Non agricultural families include all the families, who have any source of income other than agriculture such as business, employment in organised sector, in government, cooperative sector, shops, driving, rubber tapping, taxi cars, auto rickshaw, petty shops, slaughter shop etc. Any one who was not willing to reveal all sources of income also was grouped as non-agricultural families. This is why the numbers of non-agricultural families are so large.

small farmers and we presume that they do not have much taxable capacity. Thus capacity indices of 473 (122+156+195) families were constructed<sup>21</sup>.

Capacity indices of agricultural and non-agricultural families are compared to know the income levels of families having similar capacity indices. Then by comparing the amount of taxes paid by them we can conclude who is paying less tax. Thus, it helps us to assess the intersectoral inequality in taxation. Inter sectoral inequality/equity was examined also by comparing tax income ratios of cultivators of various crops with that of salaried people of various income groups.

There is an attempt to estimate the taxable capacity of a few of the top 19 agricultural families by estimating their income on the basis of their size of holding, type of crop cultivated etc.

Cost of collection of tax is a wide concept comprising various aspects of cost such as administrative cost, compliance cost, efficiency cost, social cost etc. Cost of collection of Direct taxes of agricultural sector is composed of cost of collection of Land revenue and Agricultural Income Tax. Land revenue is collected through the village offices and agricultural income tax through three types of offices such as

- (i) Assistant Commissioner (AC special) offices in Ernakulam and Kozhikodu. AC offices deal only with the tax returns of a few major companies and firms in the plantation sector.
- (ii) Agricultural Income Tax and Commercial taxes offices which deal only with agricultural income tax returns, and
- (iii) Agricultural Income Tax and Commercial taxes offices, which handles agricultural income tax returns together with sales tax returns. Their main

---

<sup>21</sup> Details of the procedure followed for constructing the capacity index are given in Chapter V.

business is to collect sales tax but they also handle some agricultural income tax files.

The expenditure incurred on Agricultural Income Tax is not available from the third type of offices as their main duty is to deal with Sales tax and they do not keep separate account for the expenditure for the collection of Agricultural Income Tax. Other two offices have their accounts and data are collected from the files of these offices to estimate the cost incurred on the collection of Agricultural Income Tax. Efficiency in tax collection was assessed by evaluating the performance of the offices, returns per rupee spent on tax collection and so on.

In order to analyse the impact of recent changes especially the impact of the introduction of compounding on tax collection we analysed the secondary data on various variables<sup>22</sup> before and after the introduction of compounding of agricultural income for tax purpose in 1991. The impact was also studied through collecting data from Agricultural Income Tax offices. Change in the cost, change in the pattern and growth of tax collection immediately before and after the introduction of compounding could be ascertained from the office files. Conventional methods like per capita tax, tax income ratio, growth rate of various taxes, share of tax in total revenue, share of tax in Net Domestic Product, share of tax in Adjusted Agricultural Income (AAI) etc. were used to analyse the data. Simple and multiple regressions were also done to interpret the data.

### **1.5 Limitations of the study**

This study has the following limitations:

- (i) A defect of the study on cost effectiveness is that, data for 1990-91, the year immediately preceding the introduction of compounding is the only year for which data are available and that too only of four offices. It means

---

<sup>22</sup> Details are given in Chapter VII

that pre compounding cost situation was derived from the data of one year of only four offices that collected Agricultural Income Tax. This is because the offices either do not have the data or are not ready to disclose.

- (ii) The net income of a cultivator is calculated on the basis of the cost and productivity data provided by agencies like NABARD, Spices Board, Rubber Board and Kerala State Planning Board. There is yearly variation in the productivity, as the plants grow older; but this could not be accounted for due to lack of credible data. Average of prices and productivity for the last three years (2000-01, 2001-02 and 2002-03) is taken to calculate net income. The average price thus derived is different from the existing market price.
- (iii) Income alone is not the only factor that determines the number and size of consumer goods possessed, assets like gold, house, vehicles owned, expenditure on electricity and telephone, type of education to the children etc. Therefore the inference that people having similar capacity index, which is constructed on the basis of these variables, have similar income is questionable. But whether the incomes are similar or not they have similar capacity to own and use them. So we are not wrong in assuming that they have similar income, because without income or accessibility to income, such assets and services of such assets cannot be enjoyed.

## **1.6 Plan of the Study**

First chapter is the introductory chapter, which states the research problem and spells out the objectives of the study. This is followed by a brief discussion on the source of data and methodology. Some of the limitations of the study are also given.

In the second chapter, a survey of the existing studies is made. This chapter deals with the important arguments for and against the taxation of agricultural

sector. This is followed by the review of the major studies at the national and states level. The studies are arranged in the order of national studies first followed by studies at the states' level and finally the studies in Kerala. Attempt is made to arrange the studies chronologically.

The third chapter deals with revenue structure of the state government. It gives the composition of total revenue, total tax revenue, own revenue, state's own tax revenue and non- tax revenue. The importance of the direct taxes of the agricultural sector in Kerala in each of the above is brought out. The relative importance of each taxes such as, sales tax in the state's own tax revenue was analysed. Third chapter also contains an inter- state comparison of the tax performance. The comparison is made with all the major south Indian states.

Fourth chapter examines the performance of the direct taxes of the agricultural sector in Kerala. Land revenue and Agricultural Income tax are taken separately to analyse the behaviour of each tax. Then all direct taxes of the agricultural sector (AGT) together were considered to analyse the total burden of the direct taxes on the agricultural sector. Here, a comparison of the direct taxes on the agricultural sector of the important South Indian states and states like Assam, Haryana and Punjab are made.

An attempt to measure the actual tax burden of a cultivator is made in the fifth chapter by estimating the net income of the cultivator from land and the direct taxes he has to pay, as per the existing tax laws. Tax income ratio was worked out to know what percentage of his income is paid as direct taxes to the exchequer and this was compared with the tax income ratio of the so-called 'properly taxed' employees of the state government. An attempt is also made to measure the taxable capacity of a few families on the basis of a family survey and a capacity index constructed on the basis of the information gathered through the survey.

Chapter six gives the estimation of the cost of collection of the taxes. Cost of collection of a tax includes administrative cost (collection cost proper), compliance cost, efficiency cost, social cost etc. The cost effectiveness was assessed by collecting data from the Agricultural Income Tax offices all over the state. Cost-revenue ratio of each office is estimated.

A comparison of cost of collection of the Agricultural Income tax in Kerala is made with cost of collection of certain taxes in some other countries to see whether cost of collection of Agricultural Income Tax is on similar levels. A comparison is also made with the cost of collection of sales tax in Kerala.

In the next chapter an analysis of the behaviour of agricultural income tax after the introduction of compounding in 1991 and in 1980s, the decade immediately preceding the introduction of compounding is made.

In the last chapter, summary of the major findings of the study, policy implications and suggestions are given.

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## **CHAPTER II**

# **REVIEW OF LITERATURE ON AGRICULTURAL TAXATION**

### **2.1 Introduction**

The question of taxing agricultural sector is a contentious issue in almost all the countries especially in the developing ones, where agriculture is still a predominant sector supplying a considerable share to the Gross Domestic Product (GDP) and providing employment and livelihood to a major chunk of the population. Politicians and economists participated and debated passionately about the pros and cons, methods and systems, effects and incidence of taxing the farm sector.

There are not many studies on the agricultural taxation in Kerala as such. We, in this chapter review the available studies in the area of agricultural taxation in India, other states and in Kerala.

First we would take up a few studies that strongly went into the pros and cons of taxing agricultural sector. This is followed by a review of the important studies on agricultural taxation at All India level, at different states' level and then in Kerala. A review of the reports of a few committees appointed by the Governments of India and Kerala is also made. As far as possible chronological order is followed in reviewing the works.

### **2.2 Why Tax Agricultural Sector?**

Taxing the agricultural sector properly was a topic of debate in India even in the 1980s that Yojana (1983), the official publication of Ministry of Information and Broadcasting, Government of India set aside two issues to bring out the opinion of different social scientists like V K R V Rao, C H Hanumantha Rao,

D T Lakdawala and A S Kahlon on the topic. Many economists participated in the debate and here we would present a few of them and then give the arguments in nutshell.

According to Rao (1983)<sup>1</sup> there is a strong case of taxing the agricultural sector. His main arguments are given below. There are large number of large farmers whose income exceed the income of non agriculturists who pay income tax .The surplus generated in areas where Green Revolution occurred is frittered away in conspicuous consumption .It is there fore necessary to mop up a part of these surpluses by the Govt. through taxation. For better utilisation of land proper taxation of agriculture is necessary. Progressive taxation of agricultural land or agricultural income can be expected to bring down the land values; such a taxation ould also help mobilize for the exchequer a part of the unearned incomes or capital gains from land. There fore case for taxation of agriculture rests not so much on grounds of revenue as on consideration of equity and other economic effects.

Raj (1973)<sup>2</sup> was a strong proponent of the taxation of the agricultural sector.

Srivastava (1970)<sup>3</sup> summarizes the arguments for augmenting the taxation of agricultural sector in India in the following words:

- (i) Five Year Plans have been agricultural oriented and a lot of money has been spent on it but taxation of agriculture has never materialized to any significant degree.
- (ii) Vast expenditure is needed for the large number of schemes being taken up for agricultural development

---

<sup>1</sup>C.H. Hanumantha Rao, "Equity demands mopping up surpluses", *Yojana*, 26 (24), (January 1983), pp.1-15.

<sup>2</sup>K.N Raj, *Direct Taxation of Agriculture* (Trivandrum: Centre for Development Studies, 1973).

<sup>3</sup>Srivastava, S.C. *Taxation of Agriculture* (Bombay: Vora &co. Publishers Pvt. Ltd, 1970).

- (iii) Agriculture in India has got modernized to a large extent and there is taxable capacity as productivity has increased.
- (iv) Inter-sectoral terms of trade have moved up in favour of the agriculture and hence there is untapped taxable capacity in agricultural sector.
- (v) Rural sector is under taxed. A comparative study of the rates of taxation of farm incomes and non farm incomes reveals the patently inequitable situation in Indian income taxation.
- (vi) Under the existing tax system, the poor farmer is relatively more taxed than the well-to-do farmers. This is because direct taxes in agricultural sector are only nominal.
- (vii) The agricultural sector is under taxed in respect of indirect taxes also. The Taxation Enquiry Commission (1953-54) confirms this view.
- (viii) Additional taxation of the corporate sector would reduce the national savings as the marginal propensity to save (MPS) of the corporate sector is high and the MPS of the rural sector is low.
- (ix) According to the NSS people in the agricultural sector do save as much as 2.7 per cent of their income and spend as much as 10.36 per cent of the consumption expenditure on items other than food such as ceremonials, intoxicants, refreshments, tobacco, pan, etc. Indian farmers would not, therefore, be put to a great burden if their incomes are taxed.
- (x) Increased agricultural taxation would increase market arrivals.
- (xi) Farm taxation would promote economic stability and bring more and more areas under monetised sector.

The strongest votary of the agriculturist was Rao (1983)<sup>4</sup> and he describes attempts at increased imposition of tax on agriculture as a will of the wisp. His views are presented below: Agriculture is also paying to the state and central exchequer; only thing is that the tax is not direct. Only people with an income (in 1983) above Rs 30000/- and odd are paying personal income tax (legal exemption plus deductions). Many of the agriculturists do not have a net income of Rs 15000/-per year let alone Rs 30000/-. Consider the financial returns from Agricultural Income Tax and balance it against the magnitude of the effort involved in. The effort would be colossal; very difficult to determine the cost of production and assess the net income from agriculture.

Agriculture is largely an individual business where family labour and owned capital including land play important role in the generation of income; the problem of depreciation and capital replacement are more intractable; there is large fluctuation in annual income and lack of monthly periodicity in receipts and production, transportation and marketing of output are so integrally mixed up, it is very difficult to plan an Agricultural Income Tax. That is why any attempt at taxing agricultural sector end up in an indirect tax.

Even if a direct tax is imposed, unless the exemption is lowered, concessions allowed are limited and direct accounting is replaced by some sort of a rough and ready average with discretionary powers for deviations from the averages, it can't work. Even if it does, the administrative work involved over the large area covered by rural India, the harassments it will stimulate and corruption it will induce will not be worth the meagre financial return it will net

No political party want to get on the wrong side of the agricultural producers. Small, marginal and even medium farmers who are not affected by Agricultural

---

<sup>4</sup> V.K.R.V. Rao, "The imposition will be a will of the wisp", *Yojana*, 26 (24), (January 1983), p.1-15.

Income Tax are ganging up with the large farmers to resist such a move because farmers are developing into a class.

Indian farmers feel sore at what they think is the step-motherly treatment they are getting, in not getting all the concessions they feel entitled to by virtue of the recognised national role they are playing for the economic growth of the country. There is also a genuine grievance for the farmers that the terms of trade is turning against them.

Market economies and cost-price-ratios are ceasing to have any relevance in regard to inputs like water, energy and credit provided by the state or a state agency; and public investment in agriculture is not getting commercial returns for government or funds for recycling into fresh investment, even though they may have their justification in social-cost benefit theories and balance of payments considerations. Our economics is much too mixed up with politics and populism, and it would be a Herculean task to put across the farming population the rationale of a direct tax on agricultural income.

There are other economists and social scientists like Lakadawala (1983)<sup>5</sup>, Jain (1975)<sup>6</sup>, Kahlon (1983)<sup>7</sup> and a host of others who joined the debate and are on either side. The only conclusion that one should draw is that the question of taxing agricultural sector was a controversial issue and debated strongly in India and unanimity eludes even today.

Next we would pass on to the review of some of the earlier studies on the taxation of agricultural sector at All India level.

---

<sup>5</sup> D.T.Lakadawala, "Why not tax income from Agriculture?-a symposium" *Yojana* 26 (24) (February 16-18, 1983)

<sup>6</sup> Anilkumar Jain, *Taxation of income in India -An Emperical Study since 1939* (New Delhi: The Macmillan Company of India Ltd., 1975)

<sup>7</sup> A.S. Kahlon, "Why not tax income from Agriculture?-a symposium" *Yojana* 26 (24) (February 16-18, 1983).

### 2.3 Studies at All India Level

Taxation Enquiry Commission (1953-54)<sup>8</sup> had looked into the taxation of agricultural sector in India and concluded that tax burden of agricultural sector was on the decline, rural sector is comparatively less taxed and suggested the taxation of unearned increments in the value of land and other property.

According to Raj (1959)<sup>9</sup> rural sector is lightly taxed compared to urban sector. The agricultural income between Rs. 1200/- and Rs.3000/- is not subjected to progressive taxation. But increased taxation of agricultural sector should not adversely affect the incentives to produce or market more. The following suggestions are made for this.

- (a) A doubling of land tax on holdings above 5 acres.
- (b) A tax on agricultural rent, the incidence of which falls on the rent receivers and fixed at 1/10 of the gross produce of the tenants, and
- (c) A surcharge on holdings above five acres under commercial crops.

These would guarantee an income of Rs.300/- crores per annum. Agricultural taxation is a must to decrease the propensity to consume in the rural sector. Revenue from agricultural taxation has shrunk in real terms and it is now about 0.75 per cent of the total value of agricultural output. The article narrates the limitations of the present agricultural tax system, the merits of Agricultural Holdings Tax (AHT) and answers the criticisms levelled against it.

Gulati<sup>10</sup> (1960) found that agricultural sector contributed only 5.2 per cent of its income as against 8.6 per cent by the non agricultural sector in 1952-53 and it

---

<sup>8</sup> *Report of the Taxation Enquiry Commission 1953-54*, Vol.3, John Matthai, Chairman. (New Delhi: Government of India, Manager of Publications, 1955).

<sup>9</sup> K.N.Raj, "Resources for the Third Plan-An Approach", *Economic Weekly* (January, 1959).

<sup>10</sup> I.S.Gulati, *Resource Prospects of Third Five Year Plan* (Delhi: Orient Longman, 1960).

was 6.8 and 10.8 in 1957-58 respectively for the two sectors. So there is a case for agriculture bearing more tax burden.

There is a disparity between the lower income groups of the agriculture and non agricultural sectors. But the lower expenditure groups in agricultural sector is not under taxed. He advocated higher taxes for richer agriculturists as they are favourably placed in comparison to the counterparts in non agricultural sector. He is strongly against Agricultural Income Tax (AIT) as a separate tax; is for rationalisation of land revenue and introduction of surcharge on commercial crops. Betterment taxes at progressive rates can fetch considerable revenue.

Khusro (1963; 1967)<sup>11</sup> and Please (1968)<sup>12</sup> give proposals to introduce elasticity and progressiveness in the existing land revenue rate structure.

Joshi *et al* (1968)<sup>13</sup> bring out the importance of land revenue till 1960-61. Land revenue always remained passive and has not subserved the case of development finance. Upper class agriculturalists could be taxed more. In a case study of Bihar, they found that taxes on agricultural sector played only a very minor role in the state's tax structure. Pattern of rural income, low rates of taxation and large scale evasion were responsible for this.

They have analysed the performance of agricultural taxes of Travancore-Cochin and later Kerala. Most of the Agricultural Income Tax was from plantation crops in the state and this tax plays an important role as a source of revenue.

---

<sup>11</sup>A.M. Khusro, "Taxation and agricultural land", *Economic Weekly* (February, 1963).  
A.M. Khusro, "Should land revenue be abolished?", *Economic Time* (June 16 and 17, 1967).

<sup>12</sup> Stanley Please, "Aspects of Agricultural tax policy in India and Pakistan" *Mimeo*, (November, 1968).

<sup>13</sup> T.M. Joshi, N. Anjanaiah, and S.V.Bhende, *Studies in the Taxation of Agricultural Land and Income in India* (Delhi: Asia Publishing House, 1968).

According to Gandhi (1968)<sup>14</sup> tax burden of agriculture sector was comparatively very low and is decreasing and interclass inequality in tax burden existed between agricultural and non agricultural sectors.

Mathew (1968)<sup>15</sup> conducted a study for 1958-59, with three objectives:

- (a) An estimation of the burden of taxation of agricultural sector taking all direct and indirect taxes of both Central and State Governments.
- (b) A comparison of agricultural and non-agricultural sector's contribution to government revenue.
- (c) An examination of agricultural taxation in relation to national goals and appraisal of the existing system of agricultural taxation and make some policy recommendations.

Agriculture is comparatively less taxed. Tax burden was fairly well distributed among different income groups within non-agricultural sector but not so in agriculture sector; higher income groups are under taxed. Direct taxes are less progressive in agriculture sector. There is much evasion of Agricultural Income Tax. So agriculture has to be taxed more and suggested measures to improve agricultural taxation in India.

Sharma's (1970)<sup>16</sup> edited work gives a detailed account of different tax systems existed in different parts of India from 200 BC to 1708 AD.

Srivastava (1970)<sup>17</sup> first of all looks at the agrarian structure that existed in India in 1960. Then he evaluates the main direct taxes of agriculture in India. Following proposals are given to raise tax collection from agricultural sector:

---

<sup>14</sup> Ved P. Gandhi, *Tax Burden on Indian Agriculture* (Cambridge, Mass.: Harvard Law School, 1968).

<sup>15</sup> E.T. Mathew, *Agricultural Taxation and Economic Development in India* (Bombay: Asia Publishing House, 1968).

<sup>16</sup> Ram Sharan Sharma, *Land Revenue In India-Historical Studies* (Delhi: Motilal Banarsidas, 1970).

- (i) Substitution of land revenue with Agricultural Income Tax is dismissed as imprudent as Agricultural Income Tax can't fetch as much revenue as land revenue.
- (ii) Combine Agricultural Income Tax with low flat rates of land tax.
- (iii) Exempt farmers with 5 acres or less from land revenue (71 per cent of the farmers) and fix a progressive tax for others.
- (iv) Merge Agricultural Income Tax with general income tax. But this has the following difficulties: (1) Agricultural Income Tax is a state subject and state governments will not agree to compromise on their fiscal autonomy (2) constitutional formalities are tedious.
- (v) It is possible to introduce in kind-taxation, as in China, South Korea and Taiwan. Taxation in kind will lead to bring non-monetized transaction and sectors to tax net. It helps the government to share a major part of the speculative profits (due to price rise). Taxation in kind can influence the composition of crop production through tax inducements or deterrents. This helps the government to have a stock of products and to exercise control over the distribution and prices of agricultural products

Angrish (1972)<sup>18</sup> suggests a rationalised scheme of direct agricultural taxes for India. He also is of the opinion that land revenue and Agricultural Income Tax are not progressive and elastic. Middle and high income classes in the agricultural sector possess taxable capacity. Land revenue and Agricultural Income Tax are inequitable and unproductive and there is inter- sectoral and inter class inequity. He also measured the tax burden of land revenue and Agricultural Income Tax on

---

<sup>17</sup> S.C. Srivastava, *Taxation of Agriculture Op.Cit.*

<sup>18</sup> A.C. Angrish, *Direct Taxation of Agriculture in India* (New Delhi: Somaliya Publications Private Ltd., 1972).

agriculture for the years 1951-52 and 1968-69. Both were declining. He estimated land revenue as per cent of state agricultural income. It was 0.58 in Kerala in 1960-61 when all states average was 1.57.

Krishna (1972)<sup>19</sup> wanted to replace outmoded land revenue system with Agricultural Income Tax to cover 'upper class' farmers who are under taxed.

Reddy (1972)<sup>20</sup> makes an attempt: (a) to study the position of benefit received by and the costs incurred in the agricultural sector so that net position is clear (b) to compare the net position of A (agricultural sector) with N (non agricultural sector) (c) to explain the pros and cons of Agricultural Income Tax and to find a better alternative. The study was for the period of 1955-56, 1960-61, 1965-66 and 1968-69. Per capita tax incidence was low for A. But per capita tax measured as per cent of per capita income was higher for A than for N.

So he concludes that the per capita tax incidence is low in A due to poor economic capacity. A receives higher per capita benefits. There is equity in tax between the lower income groups of A and N sectors, till 1960-61. Thereafter, poor among A pays less than those in N. But when additional costs on education and health services were taken note of, along with their low level of income, they bear higher tax burden than their counterparts in N sector.

Upper income groups in A pay less compared to those in N; but the inequity is not very sharp.

Most authentic and authoritative study of taxation of agricultural wealth and income in India is the one conducted by the Committee appointed by the Government of India in 1972 under the chairmanship of K N Raj. The 'Raj

---

<sup>19</sup> Raj Krishna, "Intersectoral Equity and Agricultural Taxation in India" *Economic and Political Weekly*, (7)( special number, 1972)

<sup>20</sup> K.N.Reddy, *Tax Burden on Agriculture in India –An Inquiry in to the feasibility of Agricultural Income Tax* (Baroda: Good companies Publishers, 1972).

Committee' Report (1972)<sup>21</sup> is therefore a basic text on taxation of agricultural sector in India. The report, submitted in October 1972, gives an insight into the then existing systems of direct taxation of agricultural sector and issues associated in its 6 chapters spread over 169 and odd pages.

Since we want to make a comparative study of this report and the report of the Kaaleeswaran committee and to assess the impact of these reports on the Kerala Agricultural Income Tax Act 1991 we attempt here a detailed analysis of the Report.

The report wants that agricultural sector be properly taxed and a proper system should be devised to ensure that there is progression in taxation in the agricultural sector. The existing land revenue systems did not have the element of progression. In spite of the ceilings on land holdings as a result of land reforms there is still large incomes earned from agriculture that must be subjected to progressive tax. The Committee recommended the introduction of Agricultural Holdings Tax (AHT) as an effective method of taxing agricultural sector.

The basis of Agricultural Holdings Tax be operated land not owned land as type of crop, type of cultivation etc is decided by the farmer and not by the owner; data on them are also is available from the operator.

Family (father, mother and children) must be considered as the basic unit of assessment. There should be a mechanism to integrate agricultural and non-agricultural income as large section of the agricultural population turn to non agricultural sector as a result of land ceilings. The existing wealth tax has its limitations. States should have the responsibility for the levy and collection of a tax as local conditions that affect income from agriculture differ and a tax at the national level is extremely difficult to be implemented. The computation of actual

---

<sup>21</sup> *Report of the Committee on Taxation of Agricultural Wealth and Income*, K.N.Raj, Chairman (New Delhi: Government of India, October 1972).

income from farming with any degree of precision is extremely difficult, as farmers do not maintain proper records/accounts. Therefore, it is likely that there be large-scale evasion and also harassment of farmers by tax officials.

Progressive surcharge on existing land revenue would not serve the purpose of increased taxation of the sector as there is no uniformity in the principles and procedures followed in land revenue assessments in different states and in different areas within the same state.

So the Committee suggests Agricultural Holdings Tax which it claims to be a rational system and which assures the following (i) take into account the differences in productivity on land depending upon the particular crop grown in a region (ii) incidence would be uniform in different parts of the country, and (iii) reflects changes in productivity and prices over a period of time.

Agricultural Holdings Tax has the following features:

- (i) The country should be divided into a sufficiently large number of soil-climatically homogeneous districts/ tracts so that differences having any significant influence on productivity are taken into account;
- (ii) For each such division norms of output of different crops per hectare for each year should be worked out, on the basis of estimates of yield for the previous 10 years; these should be valued at the relevant average harvest prices of the preceding three years. The State Governments should notify the markets and post-harvest marketing periods relating to each crop in each division and arrange to collect, record and publish the relevant prices on a regular basis;
- (iii) The norms so derived would provide the norms of the value of output per hectare of different crops of different districts/tracts;

- (iv) From the value of the gross output of the crops arrived at allowance should be made for the paid out costs of cultivation other than expenses of irrigation and also for depreciation of assets (other than livestock);
- (v) The value arrived at in the above manner would be the rateable value of a hectare of land, growing different crops in different districts;
- (vi) If in a given year, the average output of a crop in a district is less than half the average output of earlier 10 years, the rateable value of land under such a crop should be taken as zero. Relief may be allowed for crop failures in part or parts of a district/tract after enquiry by an appropriate authority;
- (vii) To simplify the computation, crops under a district/ tract may be suitably grouped under a few crop groups;
- (viii) For each district there will be a schedule of rateable value of land per hectare under different crops/crop-groups. The schedule should be revised every year taking into account, the crop yields of the preceding 10 years, the harvest prices of the preceding three years. The schedule of rateable value of lands under different crops in each district should be prepared on this basis every year and included in the legislation of the year in question. The construction of the schedule for each district in a state will be primarily the responsibility of the state government concerned;
- (ix) The rateable value of an assessable land holding will be computed from the rateable values of land under the crops actually grown (harvested) on it during the year of assessment after deducting the expenses of irrigation. The method for computing the rateable value and deductions allowable are discussed in detail in Chapter 3 of the Report.

- (x) Development allowance of 20 per cent of the rateable value subject to a maximum of Rs1000/- be allowed;
- (xi) The actual tax liability be computed by following a formula  $X/2$  per cent, where X is the rateable value minus development allowance;

Holdings with rateable value of Rs.600/- or above be taxed at  $x/2$  rate; below that at Re.1/- per holding. Agricultural Holdings Tax should be levied on operational holdings and on a family a basis.

Agricultural Holdings Tax should be implemented in two stages: first replace land revenue by Agricultural Holdings Tax on holdings with rateable value of Rs. 5,000/- or more and in the second stage other holdings with rateable value below Rs.5,000/-.

Assessment year be from July 1<sup>st</sup> to June 30. Recovery of tax be in instalments in the following year.

Holdings owned by trusts should be apportioned among the beneficiaries in the proportion, in which income of the trust is enjoyed by them and respective shares aggregated with the holdings of the families to which the beneficiaries belong. Where the share of the beneficiaries is indeterminate Agricultural Holdings Tax should be at a minimum of 20 per cent of rateable value.

There should be no concessional treatment for charitable or religious trust.

In the case of co-operatives if the land is identifiable as legally belonging to individual members, such lands should be treated as land belonging to the family to which these members belong. Where such lands are not identifiable, they may be deemed to be operated by the members in equal parts and each such part treated as a component of the agricultural holdings of the respective members.

Companies may be assessed on the same as family holdings subject to a minimum of 20 per cent of the rateable value of their operational holdings.

Plantation companies be assessed as per the existing Agricultural Income Tax laws. However, to the extent the area operated by them is used for growing non-plantation crops, these companies should be subjected to Agricultural Holdings Tax like any other agricultural company.

There should be an All India Committee on Agricultural Holdings Tax to ensure uniform and objective application of the Agricultural Holdings Tax with the following members (i) A non official economist (ii) An official with experience of Revenue Administration at the state level, and (iii) a technical officer who is or has been a Director of Agriculture in a state.

The committee should make a *post facto* review of the operation of Agricultural Holdings Tax and report to the Planning Commission and National Development Council.

Expected revenue of Rs. 200/- crores per annum if all holdings of rateable value of Rs. 5,000/- or above are brought into Agricultural Holdings Tax and an additional Rs. 200/- crores if Rs. 2,500/- above are brought into Agricultural Holdings Tax.

To check evasion of tax and bring about equality in taxation partially integrate agricultural income with non-agricultural income and apply the rate of tax applicable to non- agricultural incomes. There are different methods for achieving this partial integration.

Agricultural Holdings Tax should be supplemented with a tax on agricultural property and a tax on capital gains arising out of transactions in such property.

Income from live stock breeding and poultry and dairy farming be subjected to income tax

Irrigation water must be priced to meet the cost of providing it.

Raj (1973)<sup>22</sup> examines some of the issues and problems that agricultural taxation raises and makes the following observations:

- A country mainly agricultural should tax it.
- Land revenue forced farmers to produce also for market in British India.
- Japan extracted a large part of resource for industrialisation from agriculture. So did Soviet Union and China. Land revenue in India shrunk in real terms to almost insignificant proportion from 5 per cent of the total value of agricultural output in the turn of the century to  $\frac{3}{4}$  (0.75 per cent) in early 1970s.
- What can be expected at the most is to mobilize resources from this sector to make available the inputs required for accelerating the growth of agricultural output.
- When the distribution of land is very unequal the external economies created by public expenditure on development are likely to widen rather than narrow the disparities. Shift in terms of trade in favour of agriculture has similar effects. So a significant degree of progression should be introduced in the taxation of agriculture.
- Indirect taxation of agriculture is not sufficient as the additional income requirement is high and the indirect taxes would push up wages and other costs.
- Simplest method to raise additional revenue from agriculture is to levy surcharges on land revenue. But the difficulty is that land revenue does not adequately reflect differences in productivity.
- Land revenue in some states is 10 times larger than in some other states.

---

<sup>22</sup>K.N Raj, *Direct Taxation of Agriculture* Op.Cit.

- In any case, land revenue failed to provide progression into the taxation of agriculture.
- So income from agriculture should be taxed. But assessment of agricultural income presents formidable difficulties leading to either evasion or harassment.
- Apart from the tax collected from the larger plantation in states, revenue from other agriculturists is negligible. This is not because that they do not have the stipulated income. So an attractive method of direct taxation of agriculture is to be developed. There are different methods for taxing agricultural sector.

All the suggested alternatives have their limitations. All the alternatives proposed link the tax to the potential productivity rather than to the actual income. Potential productivity depends on a variety of factors such as type of soil, climate, water and crop-mix.

Agricultural Holdings Tax is a viable alternative according to Raj. Agricultural Holdings Tax (AHT) takes into account all the above, and depending on the crop-mix of each land, productivity can be ascertained. Once the classification of soil on the basis of climate and water availability is done, crop-mix alone need to be known to get the average productivity of the land. Chemical nutrients can make up for the drawbacks in soil fertility so crop mix is the most important factor. He points out the problems of Agricultural Holdings Tax:

Classification of land, which is heterogeneous, is difficult. Another problem relates to the non-availability of records relating to operational holdings. There is difference between ownership holding and operational holding. The question is whether the tax should be on operational holding or on ownership holding. The

working paper also suggests the changes that could be incorporated to solve the problems of the proposed Agricultural Holding Tax.

There should be partial integration of agricultural income with non-agricultural income to avoid tax evasion in non-agricultural income.

There will be resistance even from non-agricultural sectors to Agricultural Holdings Tax as this takes nuclear family as the unit of tax. So family income is taxed not the individual income as it is the case in personal income tax.

Bird (1970)<sup>23</sup> had studied Indian agricultural tax system. According to him Land revenue and Agricultural Income Tax are the only significant taxes on the sector and yield around 1 per cent of agricultural income and less than 5 per cent of total revenue. The situation is not expected to improve.

Jain (1975)<sup>24</sup> observes that tax burden of agricultural sector is much less compared to non agricultural sector; tax paid by agricultural sector is just 0.7 per cent of agricultural income in 1972. This is in spite of the fact that the agriculture benefited much from Five Year Plans and price moved in favour of the agricultural sector. So agriculture should bear more tax burden; there is no justification for a preferential treatment of the agriculture sector.

Lakdawala (1975)<sup>25</sup> suggests four ways to increase the contribution of agricultural sector to the state revenue:

(a) through export taxes (b) taxes on inputs (c) indirect taxes, and (d) direct taxes. The two direct taxes of agricultural sector, land revenue and Agricultural

---

<sup>23</sup>Richard M.Bird, *Taxation and Development: lessons from Columbian Experience* (Cambridge:Harvard University Press, 1970).

Richard M.Bird, *Taxing Agricultural Land in Developing Countries* (Cambridge:Harvard University Press,1974)

<sup>24</sup>Anilkumar Jain, *Taxation of income in India –An Empirical Study since 1939* (New Delhi: The Macmillan Company of India Ltd1975).

<sup>25</sup>D.T. Lakdawala, "Direct Taxation of Agriculture" *Indian Journal of Agricultural Economics*, 30(4) (October-December,1975).

Income Tax, have a lot of drawbacks. There has to be a new land resettlement if the land revenue is to be organised better; there should be periodic revision and an optimum combination of land revenue and Agricultural Income Tax must be brought about.

He doubts about the effectiveness of Agricultural Holdings Tax. Integration of agricultural and non agricultural income for tax purposes would create more problems. According to him, a new direct tax on agriculture has to be devised.

Bhargava (1976)<sup>26</sup> critically analysed various taxes that were levied on agricultural sector and suggests measures to improve the tax system. Rural households spend about 2.9 per cent of total expenditure on tax as against the All India average of 3.6 and 5.9 per cent for the urban households. So the structure of agricultural taxation must be improved.

Prasad (1987)<sup>27</sup> studied the agricultural tax systems of different states. He wants that more revenue be collected from agriculture, as there is a perceptible increase in the taxable capacity of the sector; and a large volume of expenditure is incurred on agricultural sector through the Five Year Plans. Land revenue in relation to total tax revenue varies from 3.27 for Andhra Pradesh to 0.01 for Maharashtra in 1980-81; and Agricultural Income Tax between 9.5 for Assam and 0.01 for Maharashtra. Land revenue is inelastic and it neither encourages nor discourages the agricultural sector. Agricultural Income Tax is not equitable.

The Tax Reform Committee (1992)<sup>28</sup> recommended that agricultural income above Rs. 25,000/- accruing to non-agriculturalist assesseees should be brought under the tax net. To quote, "the provisions for the taxation of agricultural income

---

<sup>26</sup> P.K Bhargava, *Taxation of Agriculture in India*, (Bombay: Vora &co. Publishers Pvt. Ltd.,1976).

<sup>27</sup> Ramayan Prasad, *Agricultural Taxation and Economic Development*, (New Delhi: Deep and Deep Publications, 1987).

<sup>28</sup> *Report of the Tax Reforms Committee Part I*, Raja J. Chelliah, Chairman,(New Delhi: Government of India, 1992)

by the Central Government that we have recommended would not affect those agriculturalists who (a) have agricultural income not exceeding Rs. 25,000/- per year, or (b) have non-agricultural income not exceeding Rs. 28,000/-.

This means that agriculturalists who have only agricultural income or who have also non-agricultural income but have agricultural income not exceeding Rs. 25,000/- will be left out. Thus, the tax will fall mainly on the larger non-agricultural assesseees, whose agricultural incomes exceed Rs. 25,000/-.

Sury (1997)<sup>29</sup> evaluates the taxation of agricultural income in India. According to him only 6 states have Agricultural Income Tax of which 3 confine it to plantation crops. Even land revenue, which formed the mainstay of states' own tax revenue during pre-independent years and even in the early post-independence period, has receded into insignificance over the years.

The near absence of direct taxation of the agricultural sector is partly due to the preponderance of big landlords and other vested interests in state legislatures. It shows how the rural rich have effectively resisted additional tax burden upon themselves. The absence or inadequacy of tax on agricultural income is an example of the insufficient use of taxation powers given to the states. Again, the unequal tax treatment of similar incomes, though from different sources, violates the principle of horizontal equity.

It is well known that the benefits of green revolution are unevenly distributed, creating an affluent elite group in rural areas. It is this class which does not pay its due to the national exchequer, and they should be taxed more and revenue so raised may be earmarked for ameliorating the economic conditions of the downtrodden in villages.

---

<sup>29</sup>M.M. Sury, *Indian Tax System* (Delhi: Indian Tax Institute, 1997).

## 2.4 Studies at the States' Level.

There are a number of studies on the level of taxation of agricultural sector in different states in India. We take a few of them which are relevant to this study.

Rao (1966)<sup>30</sup> studied the agricultural taxes in Andhra Pradesh taking Telungana, Rayalaseema and Delta separately for different size-groups of holdings, land and crops and for owner cultivator and rentiers. Changes in tax incidence over the period 1939-1959 are studied on the basis of a survey of 300 cultivators.

The study showed that there was disparity in tax burden among the three regions, Telungana paying the most with 7.15 per cent of net output followed by others paying just 4.8 per cent each.

Impact of land revenue also was highest for Telungana. Tax on commercial crops was less than food crops; irrigated food crops were taxed less than non irrigated food crops. Tax burden had been declining due to increase in prices and also change in physical productivity.

Dwivedi (1973)<sup>31</sup> dealt with agricultural taxation in Uttar Pradesh. Tax burden on agricultural sector increased from 2.29 per cent of income in 1951-52 to 5.87 per cent in 1966-67, and that of non agricultural sector from 4.03 per cent to 11.25 per cent. Per capita tax burden increased from 1.87 to 5.87 and from 4.79 per cent to 11.25 per cent for the respective sectors.

There is excess capacity in agricultural sector and there is scope for additional taxation. More than 50 per cent of the total capacity lies with the farmers having holdings above 20 acres.

---

<sup>30</sup> C.H. Hanumantha Rao, *Taxation of Agricultural Land in Andhra Pradesh* (Bombay: Asia Publishing House, 1966)

<sup>31</sup> D.N Dwivedi, *Problems and Prospects of Agricultural Taxation in Uttarpradesh* (Delhi: Peoples Publishing House, 1973)

Jain (1974)<sup>32</sup> studied the case of Haryana. He made a comparative regional analysis in terms of size groups of holdings on the basis of a survey for the years 1965-66 and also on the basis of the secondary data for the period 1950-51 to 1967-68.

Pathak and Patel (1968)<sup>33</sup> studied Gujarat situation for three years 1961-62 to 1963-64. Tax as per centage of per capita income increased from 8.92 to 11.96 and from 17.38 to 20.38 for agriculture and non-agriculture sectors respectively for the above period.

Villages in different districts have different tax burden. Land taxation (L.R) is vertically and horizontally inequitable. There was price advantage for the agriculture sector during the period.

Lindauer and Singh (1979)<sup>34</sup> give a historical view of the land taxation and its impact on land tenures in Punjab – different taxes on land that existed from 1881-82 are analysed. They examine the pre independence and post independence effect of land tax.

Thimmaiah (1979)<sup>35</sup> estimates the revenue potential and revenue efforts of four southern states and Pondicherry covering the period of the Fourth Five Year Plan, i.e., between 1969-70 and 1973-74. The study had not confined to the tax potential and tax effort but revenue potential and revenue effort.

---

<sup>32</sup>P.C.Jain, *Agricultural Taxation in Haryana* (Haryana: Kurukshetra University Press, 1974).

<sup>33</sup> Arun S. Patel and MaheshT. Pathek, *Agricultural Taxation in Gujarat* (Bombay: Asia Publishing House, 1968).

<sup>34</sup>John Lindaur, and Sarjit Singh, *Land Taxation in Indian Economic Development* (New Delhi: Kalyani Publishers, 1979).

<sup>35</sup> G.Thimmaiah, *Revenue Potential and Revenue Efforts of Southern States*, -A study sponsored by the Planning Commission ( New Delhi: Oxford and I B H Publishing Company, 1979).

Gupta (1983)<sup>36</sup> makes an attempt to examine the re-distributional effects of both taxation and expenditure policies in Punjab which in terms of per capita income has been the fastest growing state in India since 1967-68.

Agricultural sector is bearing less burden than non agricultural sector between 1968 and 1977. Per capita benefits accruing from developmental expenditure have been greater for agricultural sector.

The taxable capacity of A sector is larger than that of N sector. Upper classes possessed a large taxable capacity in the two sectors, though it was higher for the upper classes in A sector than in N sector. This suggests that there is a strong case for additional taxation of upper classes in A sector.

Agricultural taxation in Punjab was studied by Arneja (1987)<sup>37</sup>. The period under study was from 1967-68 to 1978-79. Per capita tax burden of agriculture sector increased from 3.11 per cent to 6.55 and those of non agriculture sector from 8.58 per cent to 12.76 per cent. Rich farmers with large holdings are less taxed. He puts forward ways to rationalise agricultural taxation in the state.

Chatterjee (1997)<sup>38</sup> has studied Agricultural Income Tax in West Bengal. He reviews the tax in other Indian states and brings out the features. There are two types of assesseees in Bengal;

- (a) Tea companies (b) individuals and Hindu undivided families.

Income from tea was subjected to both union tax on non agricultural income and the state tax on agriculture. 40 per cent of the business income from tea was made taxable under the former 60 per cent under the latter. In the case of tea, the central income tax officials were to determine the whole income including the

---

<sup>36</sup>Janak Raj Gupta, *Burden of Tax in Punjab-An inter sectoral and inter-class analysis* (New Delhi: Naurang Rai, Concept Publishing Company, 1983),

<sup>37</sup>J.S.Arneja, *Agricultural Taxation in Punjab* (Jalandhar: A.B.S.Publication, 1987).

<sup>38</sup> Biswadeb Chaterjee, *Tax performance in Indian States-A comparative Study* (New Delhi: Mittal Publications, 1997).

portion treated as agriculture income and the state used to collect the tax on this assessed income. West Bengal government tried to tax the entire income from plantation and the case is in the Supreme Court.

The state has a particular way of assessing the agricultural income for tax purpose. Fifty per cent of the gross income is considered as cost of production. This reduced the number of the assesseees considerably. Rates were very high varied between 5 and 60 per cent and were not revised occasionally.

In respect of both the annual rate of growth and the percentage contribution in own tax revenue over time, the performance of Agricultural Income Tax was very unsatisfactory. Collection was subjected to severe fluctuations over time. Collection depended mainly on plantations. Huge standard deductions and fall in the size of holding are the reasons for the poor performance. Accumulation of huge arrears is due to court intervention.

Various suggestions are given for improving collection from non-plantation sector of the agriculture.

## **2.5 Studies on Kerala Agricultural Taxation**

Government of Travancore-Cochin appointed a Committee in 1956 (Government of Kerala 1959)<sup>39</sup> under the chairmanship of G Parameswaran Pillai to study Agricultural Income Tax and sales tax. The committee was supposed to study the implications of Agricultural Income Tax.

The committee had tried to measure the Agricultural Income Tax and super tax demanded on the different types of agricultural produce for 1954-55 and 1955-56. It had estimated the total tax collected in T-C since 1950-51 to 1954-55.

---

<sup>39</sup> *Report of the Expert Committee on Agricultural Income –Tax and Sales Tax Travancore – Cochin, 1956*, G. Parameswaran Pillai, Chairman. Govt. of Travancore-Cochin, Trivandrum: Govt. Press, 1959.

The committee was of the opinion that the distinction between agricultural and non agricultural income cannot be eliminated and that agricultural income should continue to be an integral part of the financial structure of the state. Proposed levy of surcharge on agricultural income cannot be accepted. The existing rates of Agricultural Income Tax and super tax had to continue. Exemption limit under Agricultural Income Tax should be the same as that of Income Tax Act. Cesses and taxes levied by local bodies have to be included among allowable expenditure. Earned income relief (to encourage cultivation) to the extent of 1/5 of the total income as in the case of income tax, to a maximum of Rs. 3000/- may be allowed. The committee was against the integration of agricultural and non agricultural income for purposes of income tax, as proposed by Indian Taxation Enquiry Committee 1953-54.

Taxation Enquiry Committee led by Thavaraj (1969)<sup>40</sup> had gone fairly in detail into the land taxation in Kerala. It had unearthed the history and evolution of land tax in the three constituent units namely Travancore, Cochin and Malabar portion of Madrass, which later merged to form Kerala state. According to the Committee the tax burden was 4 per cent of the agricultural income in agricultural sector and 6.7 per cent of non-agricultural income. The Committee considered state taxes alone. The contribution of agricultural sector has not been commensurate with the benefits derived by it under the Five Year Plan.

Committee goes into each tax on land and points out the defects of each one. Basic land tax is neither equitable nor progressive. It recommended the adoption of capital value, which reflects all the dynamic changes in the environment, as the most flexible and progressive basis of land taxation if there is periodic revision of the capital value of land.

---

<sup>40</sup> *Report of the Taxation Enquiry Committee 1969*, M.J.K. Thavaraj, Chairman. (Trivandrum: Govt. Govt. press, 1969).

There is no justification in taxing agricultural income on a lower scale than non-agricultural income and put forward new rate structure. It favoured integration of agricultural and non-agricultural income for purposes of taxation. The Committee had gone into the defects of the existing procedures of the assessment and identified the sources of under assessment.

Pillai and Mathew (1969)<sup>41</sup> tried to measure the tax burden of both agricultural and non agricultural sectors in Kerala. It was a study based on a survey of 2016 households between 1967 May 1, and 1968 April 30.

There is near parity in the relative burden of taxation in agricultural and non agricultural sectors. But there exists differences in the burden on certain income groups in the two sectors, particularly in the lowest strata. The burden in agricultural sector was as high as 9.55 per cent of income for people having income below Rs. 600/- and 5.35 per cent in the non-agricultural sector. Highest income groups (Rs. 1200/- and above) pays only 5.22 per cent of income in agricultural sector and 4.99 per cent in non agricultural sector. Thus, the tax system reveals a regressive nature. Direct taxation plays a more important role in the non-agricultural sector while indirect taxation accounts for a large share for agricultural sector.

Agricultural labourers bear the highest burden 16.3 per cent of their income while cultivators pay 4.04 per cent, tenants 4.52 per cent and landlords 9.2 per cent. The reason for such a situation is the impact of general sales tax.

Gopalkrishnan (1984)<sup>42</sup> observes that tax potential in agriculture in Kerala has not been exploited to any significant extent. The collections from Agricultural

---

<sup>41</sup>E.T. Mathew, and V.R. Pillai, *Burden of taxation in Kerala-Acomparative Study of the Burden of Taxation of the Agricultural and non-agricultural sectors of Kerala 1967-1968*, (Research Programme Committee, Planning Commission, Govt. of India, 1969)

<sup>42</sup>P.K. Gopalakrishnan, *The state of Kerala Finance –Asynoptic View*, (Trivandrum: Committee on Economic Affairs K.P.C.C, 1984).

Income Tax which accounted for about 14 per cent of state's own tax revenues in 1957-58 has dropped to 4 per cent in 1979-80 and to 2 per cent in 1983-84 in spite of the fact that prices of agricultural commodities registered substantial increase during the period. He also observes that about 40 per cent of the sales tax revenue is associated with a few commercial crops like rubber, cardamom, pepper, tea, coffee and commodities like copra and coconut oil.

Government of Kerala constituted a committee on 17.11.1986 to study and make recommendations for restructuring Agricultural Income Tax laws on scientific lines, under the chairmanship of N. Kaaleeswaran (Government of Kerala 1988)<sup>43</sup>. The main recommendations of the committee are

- (i) Compounding system of payment of Agricultural Income Tax is to be introduced for holdings up to 20 standard hectares. Compounding system of Agricultural Income Tax refers to calculating agricultural income on average basis and apply a tax rate to find out the tax to be paid by the agriculturist.
- (ii) Holdings up to 3 standard hectares are to be exempted from the levy of Agricultural Income Tax.
- (iii) Standardisation of land holding is recommended for the compounding system as in Table 2.1.
- (iv) For holdings between 3 and 20 standard hectares a graded system of compounding is recommended. For holdings above 20 standard hectares and for companies, other corporate bodies and co-operative societies the income- based assessment is to continue. For those above 20 standard hectares the rate of tax should be that of the personal income tax.

---

<sup>43</sup>*Report of the Committee for Restructuring Agricultural Income Tax Laws*, N.Kaleeswaran, Chairman. (Trivandrum: Government of Kerala, Feb.1988).

Table 2.1  
Standardisation of Land Holding

Crop	Hectare extent	Standard Hectares
Rubber	1	1.5
Cardamom		
A zone	1	3.0
B	1	2.0
C	1	1.0
Tea	3	1.0
Coffee	1	1.0
Coconut	1	1.5
Cocoa	1	1.5
Areca nut	1	3.0
Pepper Cinnamon Cloves Nutmeg Cinchona	1	2.5
Sugarcane	3	1.0

Source: Report of the Committee for Restructuring Agricultural Income Tax Laws, Feb.1988, p.15.

- (v) Re-plantation allowances are recommended.
- (vi) Infilling expenses are recommended.
- (vii) Re-plantation allowance is not allowable for the year when infilling charges are claimed.
- (viii) Depreciation charges are to be allowed.
- (ix) Specific provision for disallowance of excessive claims of expenditure is to be made.
- (x) Supervisory charges, managerial expenses and general charges are to be limited to 10 per cent of the total proceeds.
- (xi) When any partner or member of association of individuals or member of joint family or tenant is separately assessed on the income from this individual properties, the share of agricultural income received or receivable by him should also be included in his total agricultural income for the purpose of assessment and the tax levied and payable by him

- which is already demanded as his share from such units shall be deducted or allowed as set off from the total tax payable by him.
- (xii) Full deduction for Life insurance premium for Rs.6,000/-, 50 per cent on the next Rs. 6,000/- and 40 per cent on the next Rs. 6,000/- be allowed. This is allowed for investments in National Savings Certificates also.
  - (xiii) The compounding rates of tax are to be made applicable for the entire properties of Trust and other charitable institutions irrespective of the extent they hold.
  - (xiv) Trusts and other Charitable institutions are to get themselves registered as such with the Commissioner of Agricultural Income Tax.
  - (xv) Institutions, which do not have such registration, are to be treated as “company” for the purpose of tax.
  - (xvi) The holdings of individuals, firms both registered and unregistered, association of individuals, tenants-in-common, family consisting of husband, wife, children and other dependents, properties jointly purchased or under common management shall be grouped together for the purpose of assessment or exemption.
  - (xvii) In the case of mixed planting the principal crop should be taken for determining the standard area. The plants that stand in more than 50 per cent of the area is to be considered as the principal crop. No tax shall be payable for the subsidiary crops. This will promote intensive cultivation.
  - (xviii) The entire holding of the assessee situated both inside and outside the state are to be taken into account, irrespective of the fact that whether the entire area is cultivated or not or whether crops that are exempted or not are planted, but levy of tax will be limited to the properties situated in Kerala.

- (xix) Once rates are fixed, revise it every five years. There need not be any inspection by the Agricultural Income Tax Officer. The rate of tax once determined shall be payable every year without change if there is no change in the extent of the holdings. While suggesting the rates of tax in compounding system the committee has taken into account, the position of crop and the income and expenditure. The need for periodic replanting and the absence of income during replanting period was taken into account while recommending the rates. So tax holiday for replanting purpose is not needed. But when the size of any holdings is expanded by new plantation, the new area will be assessed to tax under compounding system only when it starts yielding.

Kaleeswaran Committee expected that the compounding system to have the following merits:

- (1) It will be very simple to understand and efficacious in implementation.
- (2) There will be saving in cost of collection of tax compared to the present income based assessment, which requires detailed examination of the accounts and each item of expenditure. It also requires detailed and frequent inspections, which are very often disputed by the assessees.
- (3) It benefits the cultivators by relieving them from the burden of maintaining accounts, vouchers or other subsidiary records, participation in the assessment proceedings by complying with the various statutory notices and also due to the fixity of the tax burden, and
- (4) All the more the net revenue collection will not be affected.

The most important demerit of the system is the inelasticity of the tax revenue irrespective of the price and yield variation over time.

Bagchi and Rao (1987)<sup>44</sup> observed that in the case of Agricultural Income Tax in Kerala, the revenue potential was undermined by successive enhancements of the exemption limits in money terms and also in area terms.

In an article, Thomas (1998)<sup>45</sup>, President, Association of Central Travancore Agriculturist, makes a passionate demand for winding up Agricultural Income Tax in Kerala. According to him the bureaucracy uses the loopholes in the law to harass the farmers. The rate of Agricultural Income Tax is higher than the rate of the central income tax and does not allow the deduction enjoyed by the non agriculturists. According to him, cost of living index increased from 467 points in 1991-92 to 925 in 1998, the price of rubber increased from Rs. 19.75/- to Rs. 30/-, i.e., cost of living doubled while prices of rubber increased only by 50 per cent and the state government is not revising the tax rate considering this fact. Concessions given to the agriculturists by way of reduced tax rate of Agricultural Income Tax would not seriously undermine the finances of the state he argues, as Agricultural Income Tax contributes only 0.48 per cent of the tax revenue of the state. He also points out that 13 district offices of Agricultural Income Tax collect only 12.25 per cent of the Agricultural Income Tax the remaining 87.75 are collected by two offices in Ernakulam and Kozhikode. These offices handle the files of companies. So the individuals' contribution to Agricultural Income Tax come around 3 or 4 crores whereas 13 offices are to be maintained for this. So there will not be any serious revenue repercussions even if the Agricultural Income Tax on individuals are done away with considering the harassment the farmers are undergoing at the hands of the tax officials.

---

<sup>44</sup>A. Bagchi and M.G.Rao, *Review of Plan Financing in Kerala during the VI<sup>th</sup> Plan* (New Delhi: NIPFAP, 1987).

<sup>45</sup> K.T. Thomas, "Karshaka Peedanathinu Oru Niyamam", *Deepika*, 112(218&219), (August 10&11, 1998).

## 2.6 Conclusion

The review of literature makes it clear that there are not many attempts to study the issues involved in the taxation of agricultural sector in Kerala. The existing attempts have contradictory conclusions :one concluding that the agricultural sector is taxed less than the non-agricultural sector (Thavaraj committee);another holding the view that agricultural sector is taxed more than the non-agricultural sector in the state (Matew and Pillai). One of the studies holds that agricultural sector is not taxed in accordance with the benefits enjoyed by that sector under the Five Year Plans.

Gopalakrishnan says that tax potential in agriculture is not properly exploited. Bagchi and Rao supported the view. But neither of them is able to substantiate the point with evidence. Agriculturists (Thomas) oppose Agricultural Income Tax on the ground of harassment of farmers by the tax officials and that the cost of collection is greater than the revenue from Agricultural Income Tax. This contention again is not proved beyond doubt.

There fore existing studies raises more issues rather than solving them. Some of them lack conviction in their arguments or are peripheral in their rationale: some are outdated owing to the elapse of time. All the more there are many issues, which are not touched upon by any one of the study. All these justify this attempt.

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

# CHAPTER III

## STRUCTURE OF REVENUE OF THE STATE

### GOVERNMENT OF KERALA

#### 3.1 Introduction

In this chapter, an attempt is made to go into the structure of revenue of the state with the intention of bringing out the relative importance of the direct taxes of agricultural sector over the years. The study focuses on the composition of the total revenue, states' own revenue, total tax revenue, states own tax revenue, non tax revenue, etc. Their growth rates, change in importance of individual taxes, elasticity etc., are also analysed. A comparison of the revenue structure of a few selected states on key indicators is attempted.

#### 3.2 Methodology

Revenue structure of the state is studied using the conventional methods of percentages, ratios, growth rates, ranking, elasticities, etc. Elasticity of the tax system of the state is measured with respect to Net State Domestic Product (NSDP) at current prices. Since tax data are available at current price level it is logical to take Net State Domestic Product at current prices rather than at constant prices. The formula for measuring elasticity is

$$\begin{aligned} \text{El} &= (T_1 - T_0 / T_0) \div (Y_1 - Y_0 / Y_0) \\ &= (T_1 - T_0 / T_0) \times (Y_0 / Y_1 \cdot Y_0) \\ &= (T_1 - T_0 / Y_1 - Y_0) \times (Y_0 / T_0) \end{aligned}$$

where,  $T_1$  is current year's tax,

$T_0$  is previous year's tax

$Y_1$  is current year's income

$Y_0$  is previous year's income

Elasticity of the direct taxes of agricultural sector is worked out in respect of Adjusted Agricultural Income (AAI). Deducting 'income from allied activities' from total income of the primary sector arrives at adjusted agricultural income. Revenue sector of the state is studied for the entire period from 1957-58 till 2000-2001, for which data are available. Elasticities are measured for 1961-62 onwards, since Net Domestic Product data are available only from 1960-61. Comparison with the other states also is made for the above period.

Secondary data are used for the study. Sources of data are various issues of RBI Bulletin, Budget in Brief, Economic Review, Explanatory Memorandum of the Kerala State Budgets and Statistics for Planning.

### **3.3 Composition of the Revenue of the State**

Total Revenue (TR) of a state government is composed of tax and non-tax revenues in which tax revenue dominates. In Indian context, Total Tax Revenue (TTX) of a state is made up of the State's own Tax Revenue (STX) and tax revenue devolved to the states from the Central pool (CETX). State's Own Taxes are those, which are imposed, collected and used by the state governments. Share of Central Taxes (CETX) means share of taxes, which are imposed and collected by the Central Government but the proceeds are shared between Centre and states.

Total Non Tax Revenue (TNTR) of the state is composed of non tax revenue mobilized by the state governments (SNTR) and revenue granted to the states by the central government (CNTR). We try to go in to the nitty gritty of the revenue of the Kerala state government in the following pages.

#### **3.3 (1) Total Revenue**

Total revenue as the term suggests is the total revenue at the disposal of the state govt. It is not necessary that all the revenue of a state is mobilized by that state itself; a part of which is received from the Central govt. The Table 3.1 shows

that tax revenue dominated the total revenue of the state all through the years; the lowest share of it being 55 per cent in 1968-69 and highest in 2000-01 with 84.73 per cent. It was 59.37 per cent in 1960-61. In the latter half of the nineties the share is always more than 80 per cent. Thus, the share of the non- tax revenue shows a continuous decline from 43.21 per cent in 1960-61 to 15.27 per cent in 2000-01. In 1957-58, the first financial year of the newborn state of Kerala, it was 35.89 per cent.

Table 3.1  
Composition of Total Revenue

Year	TTX/TR	NTXR/TR	Total
1957-58	64.11	35.89	100
1960-61	59.37	43.21	100
1970-71	67.15	32.85	100
1980-81	76.20	23.80	100
1990-91	76.02	23.98	100
1997-98	81.03	18.97	100
1998-99	83.77	16.23	100
1999-00	84.70	15.30	100
2000-01	84.73	15.27	100

Note: TTX –Total Tax Revenue; TR-Total Revenue; NTXR-non- tax revenue.

Source: Computed from various issues of RBI Bulletin.

When we consider the source of the total revenue of the state we see that (Table 3.2) Own revenue that is the revenue mobilized by the state always dominated 62.45 per cent being the least contribution in all the period under study. The largest contribution of the Centre was 37.55 in 1970-71 and lowest in 2000-01 with just 15.27 per cent of the total revenue.

The share of State's Own tax (Table 3.3) varied between 46.2 in 1960-61 and 67.1 per cent in 2000-01. There is a perceptible increase in the share from 48.56 per cent in 1957-58. It should be alarming that the State Non Tax Revenue fell from 35.89 per cent in 1957-58 to 14.80 per cent in 2000-01.

Table 3.2  
Sources of Total Revenue (Percentages)

Year	OR/TR	CC/TR	Total
1957-58	74.53	25.47	100
1960-61	67.77	32.23	100
1970-71	62.45	37.55	100
1980-81	68.18	31.82	100
1990-91	64.47	35.53	100
1997-98	71.01	28.99	100
1998-99	72.35	27.65	100
1999-00	72.08	27.92	100
2000-01	74.85	24.15	100

Note: OR- Own revenue; CC – Centre's contributions to the state revenue

Source: Same as Table 3.1

It was as low as 8.69 per cent in 1990-91 and as high as 43.21 per cent in 1960-61. Budget documents reveal that forest provides lions share of the non-tax revenue to the state where as the state government is spending a huge amount on the public sector enterprises, economic services, etc. A detailed analysis of the State non-tax revenue is not within the scope of the study and therefore we do not attempt for it.

Table 3.3  
Composition of Total Revenue –A detailed Picture (Percentages)

Year	STX/TR	CETX/TR	SNTR/TR	CNTR/TR	AGT/TR
1957-58	48.56	15.54	26.06	9.83	10.88
1960-61	46.20	13.17	23.07	19.06	8.62
1970-71	46.48	20.67	15.97	16.88	3.03
1980-81	52.55	23.64	15.62	8.18	2.26
1990-91	55.78	20.24	8.69	15.29	1.46
1997-98	63.18	17.85	7.83	11.14	0.63
1998-99	64.57	19.20	7.77	8.45	0.83
1999-00	65.38	19.33	6.71	8.59	0.62
2000-01	67.20	17.80	7.20	6.70	0.73

Note: TR-Total Revenue; STX-State's Own Tax Revenue; CETX-Central Taxes to State; SNTR-State's Own Non Tax Revenue; CNTR-Central Non-Tax Revenue to State; AGT-Direct Agricultural Taxes

Source: Computed from various issues of RBI Bulletin, Budget in Brief.

The share of Central taxes was always less than one fourth of the total revenue; the highest being 23.645 and lowest 13.17 per cent and the share of

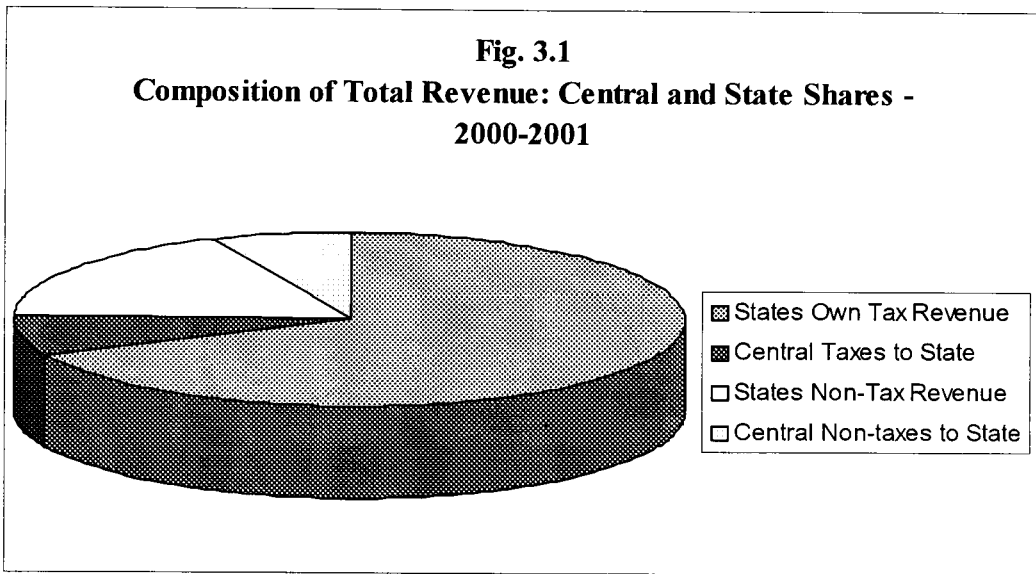
Central aid (CNTR) was less than one fifth with 19.09 per cent as the highest figure. In 1957-58, the share was 15.54 and in 2000-01, it was 17.54. The share of Central aid (CNTR) varied between 19.06 in 1960-61 and 6.60 in 2000-01. In 1957-58, it was 9.83 per cent. It shows a tendency of continuous fall in the latter 1990s.

The share of direct taxes of agricultural sector (AGT), which is composed of Agricultural Income tax and Land revenue was as high as 10.88 per cent of total revenue in 1957-58 and it fell sharply to 0.62 per cent in 1999-2000 and it was 0.73 per cent 2000-01. It was always less than 1 per cent in the 1990s.

Thus, the table shows that share of total tax and states own tax in the total revenue increased; the share of central taxes also increased though only negligently. The share of non-tax revenue decreased by almost 55.0 per cent. Share of the State non-tax revenue fell by 75 per cent.

The decline in the direct taxes of agricultural sector was sharper at about 95 per cent, i.e., it is less than 1/10 of what it was in 1957-58.

Fig. 3.1 explains the composition of the total revenue of the state in 2000-01. Lions share of it comes from the own taxes of the state. This is followed by non-tax revenue of the state, central non taxes and central taxes to the state in the that order.



### 3. 3(2) State's Own Revenue

States own revenue refers to the revenue mobilized by the state itself. It is composed of states' own tax and non-tax revenue. Share of States' Own Revenue in Total revenue shows an increase and it varies between 62.45 in 1970-71 and 74.85 per cent in 2000-01 (Table 3.2). The table shows that the share of states' own revenue (OR) had a tendency to fall till 1990-91. There after it increases. State taxes always dominated own revenue with more than 65 per cent (Table 3.4).

Table 3.4  
Composition of States' Own Revenue

Year	STX/OR	SNTR/OR	Total	AGT/OR
1957-58	65.07	34.93	100	14.59
1960-61	66.12	33.87	100	12.33
1970-71	74.43	25.57	100	4.85
1980-81	77.08	22.92	100	3.32
1990-91	86.52	13.47	100	2.26
1997-98	88.96	11.03	100	0.89
1998-99	89.03	10.75	100	1.14
1999-00	90.70	9.30	100	0.85
2000-01	90.49	9.51	100	0.99

Source: Same as Table 3.1

The share increased from 65.07 per cent in 1957-58 to 90.49 in 2000-01. This shows that state non-tax revenue continue to contribute a decreasing share in

State's Own resources and it continues to fall except in 2000-01. In 1957-58 states own non-tax revenue constituted 34.93 per cent of own revenue; that came down to a meagre 9.51 in 2000-01.

Direct taxes on agriculture (AGT) cut a still poor figure with just 0.99 per cent in 2000-01 whereas it was 14.59 in 1957-58.

### 3. 3(3) Total Tax Revenue

Total tax revenue of a state in India is composed of the taxes imposed and collected by the concerned state (STX) and taxes mobilized by the centre but a portion of which is devolved to the states (CETX). Table 3.5 shows the composition of total tax revenue. States' own tax revenue increased from 75.75 per cent in 1957-58 to 79.29 in 2000-01. Share of central taxes fell marginally from 24.25 per cent to 20.71 per cent in the same period. It was as high as 31.1 per cent in 1980-81. Direct taxes of agricultural sector continue their dismal performance. It decreased sharply from 16.98 per cent in 1957-58 to 0.87 per cent in 2000-01. Between 1960-61 and 1970-71, the fall was from 14.52 per cent to 4.51 per cent. The later half of the 1990s had a share always less than 1 per cent. The last year of the decade, however shows a mild increase (by 0.14 per cent) in the share.

Table 3.5  
Composition of Total Tax Revenue

Year	STX/TTX	CETX/TTX	Total	AGT/TTX
1957-58	75.75	24.25	100	16.98
1960-61	77.80	22.2	100	14.52
1970-71	69.20	30.8	100	4.51
1980-81	68.90	31.1	100	2.97
1990-91	73.37	26.63	100	1.92
1997-98	77.97	22.03	100	0.78
1998-99	77.08	22.92	100	0.99
1999-00	77.18	22.82	100	0.73
2000-01	79.29	20.71	100	0.87

Source: Same as Table 3.1

### 3.3 (4) Composition of State's Own Tax Revenue

States' Own Tax revenue is composed of taxes like Sales tax, Motor vehicles Tax, Excise Duty etc. Sales tax always dominated as single tax in states tax revenue.

Table 3.6 gives the major taxes in the state and their contribution to the states' own tax revenue. Sales tax which contributed only about 1/3 (34.48 per cent) of the state's own tax revenue in 1957-58 is now contributing about ¾ (74.01 per cent) in 2000-01. Excise duty's share had increased from 16.2 per cent to 19.38 per cent in 1980-81 and shows a continuous decline since then and contributes about 10.32 per cent in 2000-01. Stamp duty and Motor Vehicles Tax (MVT) have almost same declining trend in their contribution; both providing more than 11 per cent (11.09 and 11.54) in 1957-58 and less than 7 per cent (6.68 and 6.87) in 2000-01 respectively. Fall in the share of Motor Vehicle's tax by almost 50 per cent in spite of the high penetration of high value vehicles into the roads calls for special attention.

Table 3.6  
Individual Taxes as Percentage of States Own Tax Revenue

Year	SLTX/ STX	EXD/ STX	STPD/ STX	MVT/ STX	LR/ STX	AIT/S TX	AGT/ STX
1957-58	34.48	16.19	11.09	11.54	8.70	13.72	22.41
1960-61	40.16	12.83	10.43	11.70	7.15	11.51	18.66
1970-71	55.05	14.72	9.75	10.03	1.69	4.82	6.52
1980-81	60.60	19.38	7.68	5.95	0.95	3.36	4.31
1990-91	59.74	13.09	9.10	5.53	0.83	1.79	2.62
1998-99	72.41	11.39	6.48	6.95	0.70	0.58	1.29
1999-00	74.20	11.38	5.38	7.33	0.67	0.27	0.94
2000-01	74.01	10.32	6.68	6.87	0.70	0.40	1.09

Note: SLT-Sales Tax; EXD-Excise Duty; STPD- Stamp Duty and Registration Fee, MVT-Motor Vehicle Tax; LR-Land Revenue; AIT-Agricultural Income Tax, AGT- Agricultural taxes.

Source: Same as Table 3.1

Share of land tax (LR) fell from 8.7 per cent in 1957-58 to less than 0.70 per cent in 2000-01. It was even lesser in some other years. The fall in the

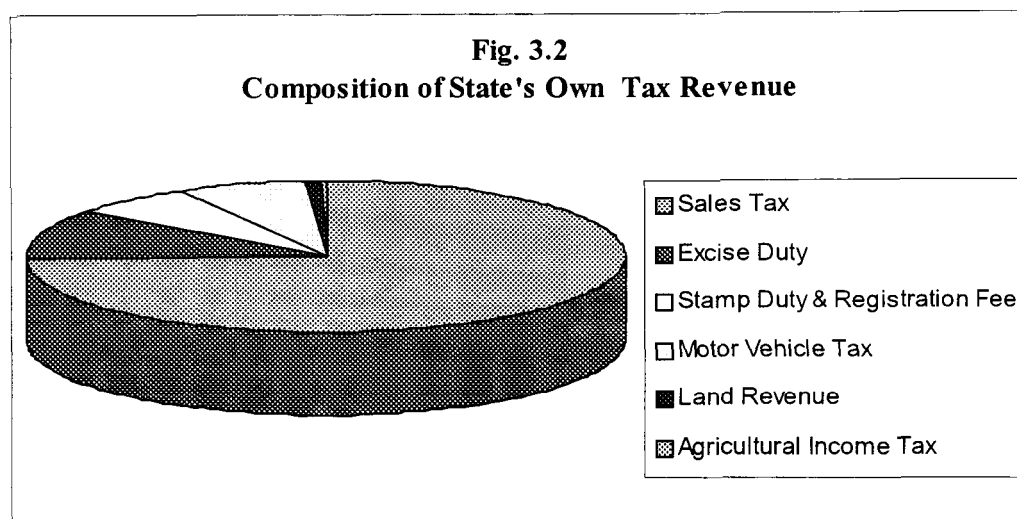
performance of Agricultural Income tax (AIT) was more severe from 13.72 per cent to 0.40 per cent in the same period. Fall in the case of both taxes was severe in the early 1970s, land revenue declined from 7.15 per cent in 1960-61 to 1.69 per cent in 1970-71. It was less than 1 per cent ever since. Agricultural Income Tax also showed the same trend: a fall from 11.51 per cent in 1960-61 to 4.82 per cent in 1970-71. In the 1990s the share further declined to less than 1 per cent.

Both Agricultural Income tax and Land Revenue taken together also reflect this trend. Both together (AGT) contributed about 22.41 per cent in 1957-58 and it is only 1.09 per cent in 2000-01. Central tax as percentage of state tax shows ups and downs; it was 32.01 per cent in 1987-58, rose to 44.99 per cent in 1980-81 and 26.11 per cent in 2000-01.

Thus it is clear that sales tax alone contributes about  $\frac{3}{4}$  of the states of own tax revenue and all other taxes together contribute only one-fourth. Direct taxes of agricultural sector provide only less than one per cent of the State's Own tax. The state is facing the threat of putting all the eggs in a single basket, especially in the context of the implementation of Turnover Taxes in place of sales tax.

Fig.3.2 shows the composition of State's own tax revenue in 2000-01. It reveals that lions share of the State's own tax is from Sale's tax followed by Excise duty, Motor vehicle's tax and Stamp duty and Registration fee. Contribution of Land revenue and Agricultural Income tax are very little.

Table 3.7 shows the ranks occupied by the major taxes in the states 'own tax revenue. Numbers in brackets show the hypothetical situation of direct taxes of agricultural sector ie. Agricultural Income Tax and Land tax, which is also called basic tax are taken together.



Sales tax always held the most important position followed by Excise duty. Land revenue had either last or last but one position.

Table 3.7  
Ranks of Individual Taxes

Year	SLT/STX	EXD/STX	STD/STX	MVT/STX	LR/STX	AIT/STX	AGT/STX
1957-58	1	2(3)	5(5)	4(4)	6	3	(2)
1960-61	1	2(3)	5(5)	3(4)	6	4	(2)
1970-71	1	2	4	3	6	5	(5)
1980-81	1	2	3	4	6	5	(5)
1990-91	1	2	3	4	6	5	(5)
1997-98	1	2	3	4	5	6	(5)
1998-99	1	2	4	3	5	6	(5)
1999-00	1	2	4	3	5	6	(5)
2000-01	1	2	4	3	5	6	(5)

Note: Figures in Brackets are ranks of individual taxes when agricultural taxes are taken together and ranked as a single tax.

Source: Same as Table 3.1

Stamp duty was fifth in 1957-58 and improved to 3<sup>rd</sup> in 1980-81 and stayed there still 1997-98 and then fell to 4<sup>th</sup> rank. When direct taxes of agriculture are taken together stamp duty had only the 6<sup>th</sup> position. Motor Vehicles Tax was 4<sup>th</sup> in 1957-58, improved to 3<sup>rd</sup> in 1960-61 fell back to 4<sup>th</sup> in 1980-81 and improved again to 3<sup>rd</sup> rank in 1998-99. Land revenue had 6<sup>th</sup> position till 1990-91 and 5<sup>th</sup> rank ever since. Agricultural Income Tax, which had 3<sup>rd</sup> position deteriorated continuously and since early 1990s it has only the last rank, i.e., 6<sup>th</sup>. Direct taxes

of agriculture together had 2<sup>nd</sup> rank for 1957-58 and 1960-61. But since 1970-71, it has the last position.

### 3.4 Growth of Revenue

Growth of different revenue variables is studied in compound growth rates. Average growth rate of agricultural income (Table 3.8) is 10.57 between 1960-61 and 2001. Agricultural taxes (AGT) and Agricultural Income Tax increased much less (7.9 and 7.08 respectively) than that. Net State Domestic Product increased by 13.39 per cent on the average. All revenue variables except Agricultural Income tax, Agricultural taxes (AGT) and non- tax revenue show a higher increase than the increase in Net State Domestic Product. Net State Domestic Product and Adjusted agricultural income showed highest growth in the 1990s. But all the tax variables and also Total revenue show highest growth rates in 1970s. Agricultural taxes and Agricultural Income Tax had the best performance in the 1970s and the worst in the 1990s.

Table 3.8  
Compound Growth Rate in Each Decade

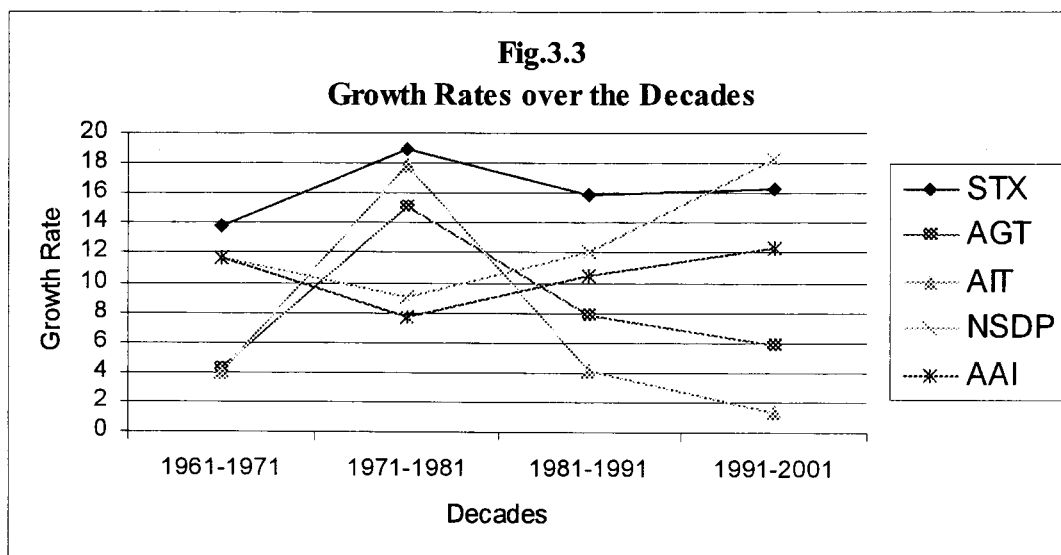
Period	TR	TTX	STX	CETX	TNTR	SNTR	CNTR	AGT	AIT	NSDP	AAI
1961-1971	14.52	14.38	13.80	16.17	14.62	10.47	18.51	4.30	3.98	11.71	11.68
1971-1981	17.24	17.64	18.96	14.39	16.29	6.10	1.27	15.11	17.92	9.02	7.67
1981-1991	13.61	15.10	15.96	12.91	9.20	10.32	23.76	7.80	4.12	12.08	10.43
1991-2001	14.27	15.50	16.27	13.09	9.10	12.00	6.10	5.89	1.27	18.32	12.31
1960-2001	14.57	15.74	15.84	15.46	11.67	12.18	12.95	7.90	7.09	13.39	10.57

Note: TR- Total Revenue, TTX-Total Tax revenue, STX-States' own tax revenue, CETX- Central taxes devolved to the state, TNTR-Total non-tax revenue, SNTR- States' own non-tax revenue, CNTR- Central non-tax revenue to the state, AGT- Direct agricultural taxes, AIT- Agricultural Income Tax, AAI- Adjusted agricultural income.

Source: Same as Table 3.1.

Fig. 3.3 helps us to compare of the compound growth rates of State's own tax revenue, adjusted agricultural income, total agricultural taxes (AGT) and Agricultural Income Tax in different decades. Agricultural taxes have low and declining growth rate. This is in contrast to the increasing, high growth rates of

adjusted agricultural income and Net Domestic Product. State's own tax revenue is showing increasing growth rate even at the high rate of growth of about 16 per cent.



If we consider the growth rates of 'ten years total' (decadal total) over the previous ten years (Table 3.9) total 1981-90 decade was comparatively better for Total revenue (284.5 per cent) Total Tax revenue (348.5 per cent), State's Own tax (353.47 per cent) and also for Agricultural taxes. 1971-80 was the better decade for Central taxes and Total non-tax revenue. Compared to all other variables, Agricultural taxes had a poor performance in this respect also.

Table 3.9  
Growth Rate of Ten Year Totals over Previous Ten Year Totals

Period	Gr. over Last decade	Gr. over last decade	Gr. over last decade	Gr. over last decade	Gr. over last decade	Gr. Over last decade
1961-1970						
1971-1980	282.55	318.00	299.37	373.65	229.10	108.49
1981-1990	284.50	348.50	353.47	335.98	164.66	123.29
1991-2000	251.39	274.39	350.82	219.53	212.21	109.75

Source: Same as Table 3.1

### 3.5 Tax Income Ratio

Ratio of tax to state income is another measure of tax performance. Here ratio is worked out in terms of Net State Domestic Product at current price and Adjusted Agricultural Income at current price. Table 3.10 presents the ratios of Total revenue, Total Tax revenue and States' own Tax to Net State Domestic Product of Kerala and ratio of Agricultural taxes (AGT) to adjusted agricultural income.

Table 3.10  
Ratio of Total Revenue, Total Tax, State Tax and Agricultural Taxes to NSDP  
and AGT to AAI

Year.	TR/NSDP	TTX/NSDP	STX/NSDP	AGT/NSDP	AGT/AI
1960-61	0.105	0.061	0.047	0.010	0.016
1965-66	0.113	0.071	0.054	0.006	0.013
1970-71	0.119	0.080	0.055	0.005	0.007
1975-76	0.158	0.099	0.072	0.007	0.012
1980-81	0.168	0.128	0.088	0.009	0.011
1985-86	0.213	0.146	0.113	0.010	0.013
1990-91	0.197	0.150	0.110	0.007	0.010
1995-96	0.155	0.126	0.096	0.003	0.006
1998-99	0.141	0.118	0.091	0.002	0.005
1999-00	0.139	0.118	0.091	0.001	0.004
2000-01	0.150	0.120	0.098	0.002	0.006

Source: Calculated from various issues of RBI Bulletin, Economic Review and Statistics for Planning

Note: NSDP and AAI (Adjusted Agricultural Income) in Current prices.

Ratio of Total revenue to Net State Domestic Product showed a rapid increase from 0.10 in 1960-61 to 0.27 in 1979-80. 1980s always maintained the ratio close to 0.20 but 1990s present a declining tendency in the ratio from 0.197 in 1990-91 to 0.139 in 1999-2000.

Ratio of Total tax to Net State Domestic Product was 0.06 in 1960-61 and it continued to be almost the same till 1976-77, when it was 0.11 and it further increased to 0.198 in 1979-80 (not given in the Table). Then it started declining and the decline is sharper in the 1990s.

State' Own taxes as a ratio of Net State Domestic Product showed a trend of increase till 1979-80 from 0.047 in 1960-61. After 1979-80 it started to decline and it is just 0.091 in 1999-2000.

Ratio of direct taxes of agricultural sector to agricultural income was the highest in 1961-62 and had continuously declined and it was at the lowest level in 1996-97 at 0.00319. The year 1999-2000 does not show much improvement.

The analysis shows that maximum revenue collection attained was just 27.4 per cent of the Net State Domestic Product in the state; maximum tax collected was just 19.8 per cent and states' own tax collection was 13.5 per cent of the Net State Domestic Product; all in 1979. The highest percentage of agricultural income collected as direct taxes was just 1.6 per cent at the most and at present it is as low as 0.2 per cent. Now the total revenue is 15 per cent of the Net State Domestic Product Total tax revenue is 12 per cent, State's own tax revenue is 9.8 per cent of Net State Domestic Product and agricultural taxes is about 0.6 per cent of the adjusted agricultural income in 2000-01.

### **3.6 Elasticity of the Tax System**

Elasticity of the tax system refers to the responsiveness of the tax system to various determinants of the tax. It helps us to understand how the system responds to changes in these determinants and in various periods. Here we calculate the income elasticity of the tax system, because income is the single most determinant of the tax system. We have worked out elasticity of Total taxes and States' own taxes to the Net State Domestic Product and elasticity of Agricultural taxes.(AGT) to AAI (Adjusted agricultural income).

Out of the 40 years considered, elasticity of total tax was positive in 38 years, i.e., there is increase in the total tax revenue whenever there was an increase in the net domestic product and only in two years 1971-72 and 1979-80 when this direct

relationship was not observed (Table 3.9). In 22 years the elasticity was more than 1 (more than unity), i.e., proportionate increase in total tax was more than the increase in income and in 16 years elasticity was positive but less than unity or less than one meaning that proportionate increase in total tax was less than the increase in income.

Table 3.11  
Elasticity of the Tax System

Year	EL.TTX	EL.STX	EL.AGT
1961-62	1.448	1.588	1.302
1965-66	0.554	0.563	0.458
1970-71	1.373	1.109	-0.754
1975-76	3.032	2.985	-7.533
1980-81	0.183	0.203	0.841
1985-86	1.669	2.972	-1.239
1990-91	0.580	0.620	1.939
1995-96	0.966	0.936	1.068
1998-99	0.326	0.240	7.547
1999-00	1.006	1.018	-1.891
2000-01	1.47	1.74	-3.2

Note: Elasticity of TTX and STX are in relation to NSDP and AGT in relation to adjusted agricultural income

Source: Same as Table 3.8.

The highest elasticity (7.13) was observed for the year 1976-77, the year of internal national emergency in the country. States own tax revenue also had almost similar elasticity as that of the above. 38 years experienced positive elasticity and 2 years negative. 21 years had elasticity greater than unity and 17 years greater than zero but less than one. Again highest positive elasticity was observed for 1976-77 followed by 1975-76, the year of national emergency.

But direct taxes of agricultural sector (AGT) have a different picture. Twenty years experienced negative elasticity, i.e., out of the 40 years considered direct taxes' collection for 20 years did not respond positively to increases in the agricultural income. For 12 years elasticity was greater than unity and 8 years experienced positive elasticity but less than unity. It seems that change in

agricultural income is not the major determinant in the revenue collected from agricultural sector in the form of direct taxes.

### 3.7 State Comparisons

In the succeeding section, a comparison of the performance of Kerala state with other important South Indian states and All India average in respect of revenue collection, tax collection and direct taxes of agricultural sector is made<sup>1</sup>. Comparison on various grounds such as per capita income, tax income ratio, elasticity etc., are made.

#### 3.7(1) Per capita Tax

We take up the per capita tax behaviour of these states first. From Table 3.12, it is clear that per capita tax of Kerala (Rs.2071/-) is much higher than the All India per capita tax of Rs 1296/- in 2001-02. Rate of growth (not in the Table) also was much higher for the state 17362 per cent compared to the all India rate of growth (12808.37 per cent) in per capita tax, during the period from 1960-61 to 2001-02.

Table 3.12  
Per Capita Tax of Different States (Rs.)

Years	Kerala	AP	T.N	Karnataka	All states
1960-61	11.86	11.69	12.35	10.23	10.04
1970-71	32.27	31.66	36.58	35.15	29.36
1980-81	132.00	109.00	68.00	128.00	97.00
1990-91	450.00	417.00	277.00	521.00	367.00
1997-98	1431.00	970.00	1441.00	1275.00	850.00
1998-99	1463.00	1073.00	1581.00	1362.00	917.00
1999-00	1618.00	1201.00	1776.00	1499.00	1039.00
2000-01	1820.00	1398.00	1988.00	1736.00	1183.00
2001-02(RE)	2071.00	1539.00	2089.00	1918.00	1296.00

Source: Various Issues of Budget in Brief. Note: RE- Revised estimate

<sup>1</sup> For comparison of all states in India see Government of Kerala (2004), *Budget in Brief 2003-04*, (Trivandrum: Government Press, 2003), p..B-1.

Among the South Indian states, Kerala is second only to Tamil Nadu in respect of per capita tax as it was the case in 1960-61 and second only to Karnataka in respect of rate of growth of per capita tax over the 40 years period. It can be noticed that Kerala had always maintained its first or second position all throughout the years except in 1970-71, when it was third. It can also be noticed that all the South Indian states performed better than the All India average in all the years.

### 3.7(2) Tax-Income Ratio

Another variable which measures the tax performance and on which comparison is made is Tax income ratio. State tax -income ratio worked out as percentages of states' own taxes to Gross Domestic Product shows that Kerala's figures are much higher than the All India averages (Table 3.13). Except for Andhra Pradesh all the South Indian states share this common feature in the last three years. Out of the eight years given in the Table, Tamil Nadu occupied first place for 4 years and Kerala for 3 years.

Table 3.13  
State Tax Income Ratio (Percentages)

Year	Kerala	A.P.	T.N.	Karnataka	All states
1960-61	4.36	3.88	3.52	3.64	3.43
1973-74	5.41	5.27	7.84	6.97	4.99
1980-81	10.06	8.31	10.40	9.74	6.17
1990-91	11.11	8.78	12.05	NA	NA
1997-98	9.10	7.70	8.40	8.90	5.80
1998-99	8.30	3.50	8.10	7.90	5.60
1999-00	8.00	2.90	8.60	8.10	5.80
2000-01	7.80	3.60	8.90	8.60	6.20

Source: Same as Table 3.12

Karnataka occupied either second or third position and Andhra Pradesh was always the last except in 1960-61. It should be noticed that in the last three years, i.e., from 1998-99, the performance of Andhra Pradesh was far below the All India averages let alone the South Indian standards. Kerala's ratio is declining since

1997-98 while those of Tamil Nadu, Karnataka and All states average are increasing. Tax-income ratio was the highest for 'All states' in 2000-01.

### 3.7 (3) States' Own Tax and Total Revenue

States' own tax performance in relation to the Total revenue of the state is attempted at in this section.

Data presented by Budget in brief shows that states own tax revenue as percentage of total revenue was always greater than the All India figures in all the South Indian states in all the years for which data are available (Table 3.14). Tamil Nadu was first in all the years, Andhra Pradesh was the last and Kerala and Karnataka second and third respectively.

Table 3.14  
State's Own Tax Revenue of Different States as Percentage of Total Revenue

Year	Kerala	A.P	T.N.	Karnataka	All states
1960-61	45.04	50.26	44.60	40.77	NA
1970-71	46.48	52.26	48.59	49.19	NA
1980-81	52.55	46.03	49.93	49.78	NA
1984-85	55.26	51.16	58.25	52.27	44.70
9990-91	60.19	49.50	61.40	59.90	45.00
1998-99	65.00	55.83	67.49	61.82	50.00
1999-00	72.00	60.89	73.07	67.41	58.00
2000-01	72.00	61.09	67.01	68.11	59.00

Note: NA-Not Available

Source: Same as Table 3.1 and varies issues of Budget in Brief.

### 3.7 (4) Central Taxes to the States and Total Revenue

Next we try to analyse the contribution made by Central Govt. in the form of devolved central taxes to the states. This will give picture of the Centre's share of taxes to different South Indian states and if any particular state received special consideration.

From Table 3.15, it is clear that central taxes share in the TR of all the South Indian states were always less than the All India average in all the years. Andhra

Pradesh was close to the All India average. Tamil Nadu and Karnataka were way behind the All India figures. Kerala also is lagging behind the All India averages.

Table 3.15  
Central Taxes to Different States as Percentage of Their Total Revenue

Year	Kerala	A.P.	T.N.	Karnataka	All states
1960-61	12.84	16.15	15.03	12.97	NA
1970-71	20.67	21.96	18.72	18.24	NA
1980-81	23.64	23.39	22.79	20.74	NA
1984-85	20.74	19.55	19.96	17.18	21.35
1990-91	20.24	21.45	19.71	16.97	21.00
1998-99	19.19	21.09	16.89	17.00	22.00
1999-00	19.33	22.60	17.85	19.00	25.00
2000-01	17.54	23.03	15.20	19.00	25.00

Source: Same as Table 3.13

The fact that this was the case in all the years should not be lost sight off. The criteria followed for devolving central taxes among states were clearly biased against the South Indian states, which performed better in all other respects. This means that north Indian states always benefited at the cost of the south Indian states. Andhra Pradesh got a better consideration among the south Indian states.

### 3.7(5) States' Own Taxes and Total Taxes

Now let us analyse the performance of each state in respect of their tax collection to their total tax, which includes tax revenue mobilized by each state and also tax revenue devolved to the state from Central taxes.

States' own taxes as percentage of total tax revenue of the state (Table 3.16) shows an increasing tendency for Kerala and Tamil Nadu since 1990-91. It is above 75 per cent of the total tax and is approaching 80 per cent for Kerala and is more than 80 per cent for Tamil Nadu. In this respect also, Andhra Pradesh has a comparatively poor performance among the four South Indian states. Tamil Nadu has the best performance. Kerala and Karnataka are similar in their performance.

Table 3.16  
State's Own Taxes of Different States as Percentage of their Total Tax

Year	Kerala	A.P.	T.N.	Karnataka
1957-58	75.75	76.89	78.92	74.00
1960-61	77.80	75.69	74.79	75.86
1970-71	69.20	70.42	72.19	72.95
1980-81	68.90	66.31	68.66	70.59
1990-91	73.37	69.77	75.69	77.93
1997-98	77.97	67.59	76.09	74.66
1998-99	77.08	72.57	79.98	78.30
1999-00	77.18	72.93	80.36	78.40
2000-01	79.29	72.62	81.52	77.84

Source: Same as Table 3.1

### 3.7(6) Central Taxes and Tax Revenue of the States

We have seen that share from Central taxes is a major source of revenue for the states. It constitutes a considerable portion of the total tax revenue of a state.

Andhra Pradesh received the largest share of central taxes in almost all the years except 1957-58. The share of central taxes in its total tax increased up to 32.41 per cent in 1997-98 (Table 3.17). Share of Central taxes to Tamil Nadu, Kerala and Karnataka in their total tax revenue show almost similar tendency of decline and revolve around 20 per cent. This could be due to the better tax effort on the part of these states, or the leniency shown towards Andhra Pradesh by the criteria followed for devolving central taxes to the states.

Table 3.17  
Central Taxes of Different States as Percentage of their Total Tax

Year	Kerala	A.P.	T.N.	Karnataka
1957-58	24.25	23.11	21.08	25.95
1960-61	22.20	24.31	24.21	24.14
1970-71	30.80	29.58	27.81	27.05
1980-81	31.10	33.69	31.34	29.41
1990-91	26.63	30.24	24.31	22.07
1997-98	22.03	32.41	23.91	23.35
1998-99	22.92	27.43	20.12	21.70
1999-00	22.82	27.07	19.64	21.60
2000-01	20.70	27.39	18.48	22.16

Source: Same as Table 3.1

### 3.7(7) Elasticity of The Tax System

In the following section we shall analyse how responsive are the tax systems of different states to their Net State Domestic Product. A sound tax system should be responsive to the changes in the tax base.

Table 3.18 presents a picture of the elasticity of tax system of the South Indian states. All the periods considered show positive income elasticity of tax in all the states. For Kerala and Karnataka, elasticity was greater than unity for five out of seven periods studied, for Andhra Pradesh six out of seven and for Tamil Nadu three out of seven periods. For all the states, 1998-99 show the elasticity to be less than one. Kerala had an elasticity of less than unity for the last two years of the last decade. This means that responsiveness of tax collection is not in proportion to the increase in income.

Table 3.18  
Elasticity of State's Own Taxes in Relation to NSDP

Year	Kerala	AP	T.N	Karnataka
1970-84	2.01	1.79	2.28	1.59
1980-91	1.38	1.14	1.50	1.44
1980-95	1.59	1.06	1.31	1.37
1996-97	1.00	1.36	0.84	0.55
1997-98	1.50	8.72	0.55	1.34
1998-99	0.24	0.60	0.71	0.41
1999-00	0.78	1.79	1.32	1.04

Source: Same as Table 3.12

### 3.8. Conclusion

The following conclusions can be drawn from the foregoing analysis.

Lions share of the state's total revenue was from the tax revenue and its share was on the increase showing a decline in the share of non- tax revenue. States' own tax revenue is the major contributor to total revenue of the state and its share is on the increase. Share of Own Revenue moved between 74.85 and 62.45 per cent in the period under study. Share of states non- tax revenue fell alarmingly.

Share of central taxes shows a moderate increase from 13.17 to 17.80 per cent. Share of Central aid ranged between 19.06 per cent in 1960-61 and 6.7 per cent in 2000-01 and there is continues fall in the 1990s.

Share of direct taxes on agricultural sector in Total revenue of the state fell sharply from 10.88 in 1957-58 to 0.73 in 2000-01.

Though there is a multiple tax system sales tax is the major bread- winner for the state and its role is increasing and it is 74.01 per cent of the states' own tax revenue.

Direct taxes on agriculture together contribute just 1.09 per cent of states own tax revenue. It fell from 22.41 per cent in 1957-58.

There is manifold increase in all the components of total revenue largest growth seen in States' own tax followed by Total tax and Total revenue in that order in the period under study. Direct taxes on agriculture showed the lowest growth rates. The decade 1971-80, when India had the National Emergency, performed better than any other decade.

Ratio of Total Revenue to Net State Domestic Product was less than to 0.2. Ratio of Total tax to Net State Domestic Product was 0.15 in 2000-01. Ratio of States' own tax to NSDP increased in the early years and declined thereafter to 0.098 in 1999-2000. This shows that total revenue comes about 15 per cent of Net State Domestic Product in 2000-01. This was 10.5 per cent in 1960-61 and highest (27.4per cent) in 1979-80. Total tax revenue was about 6.1 per cent in 1960-61 and is 12 per cent in 2000-01. The highest was (19.8 per cent) in 1979-80.

Ratio of direct taxes of agriculture to agricultural income declined to a very insignificant level of 0.006 in 2000-01. Tax (Total Tax and State's own Tax) was positively income elastic in 38 out of 40 years studied. But direct taxes on agriculture had positive income elasticity only in 20 out of 40 years considered.

Positive income elasticity was highest in 1976-77 and 1975-76, the years of National Emergency. But agricultural taxes did not show any influence of the National Emergency.

Per capita tax in Kerala and its growth rate were always larger than All India average. Among the South Indian states, Kerala stands second to Tamil Nadu in per capita tax and second to Karnataka in the growth rate of per capita tax.

State tax income ratio was greater than All India figure. There is a mixed performance in the South. Kerala always maintaining high levels, though not always the best.

Positive elasticity of tax in all the southern states is observed. All the states under consideration depended considerably on direct taxes of agriculture, as a source of revenue in the early years of their constitution and there is a sharp fall now. The dependence is only marginal now. Kerala's dependence though marginal on agricultural income as a source of revenue is the largest among Southern states.

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## CHAPTER IV

# PERFORMANCE OF AGRICULTURAL TAXES IN KERALA

### 4.1 Introduction

It is seen in the last chapter that the performance of agricultural taxes are comparatively low in relation to total revenue, total tax revenue, state tax revenue and own revenue. It was also seen that agricultural income collected as direct taxes was also low. But, this does not conclusively tell us that performance of agricultural taxes is poor. The relatively poor performance of these taxes can be due to the better performance of the other variables while agricultural taxes also might have done well. Therefore, before concluding as to whether agricultural taxes are performing bad or not we have to assess the performance of these taxes in itself, and its performance in relation to the taxable capacity of the sector. In this chapter, we are trying to assess the performance of different agricultural taxes in the state.

Tax performance of a sector depends on the direct and indirect taxes paid by it. There are a large number of direct and indirect taxes in the state. We assume that indirect taxes are paid both by agricultural and non-agricultural sectors equally; so there is equity with respect to indirect taxes between sectors.

But direct taxes paid by different sectors are different and the tax burden borne by different sectors differ. It is argued that non-agricultural sector especially the salaried class whose income is accounted is fairly taxed in Kerala. Or there is no complaint as to there be under taxation of non-agricultural sector in Kerala. The only complaint about non- agricultural sector is that some sections of it especially the business community and traders do not reveal their income fully and do not pay tax properly. There was a time when 97.5 per cent of additional incomes were

to be paid as income tax by the upper income groups. In addition to that, they had to pay Profession tax. This had affected their incentive to work, save and invest. What actually happens now is a reduction in tax rates, with the realisation that more tax rates reduce tax revenue.

Our attempt is to assess the performance of the direct taxes of the agricultural sector as it is clear that tax burden of the indirect taxes are evenly distributed across the sectors and the debate, therefore centres around whether the direct taxation of agricultural sector is fair or not.

Agricultural income is said to evade taxation and it is said that agricultural sector is not fairly taxed. Therefore it is argued that there is unexploited potential in agricultural sector. The questions we want to answer are

- (i) whether the agricultural sector is properly taxed?
- (ii) whether there is unexploited taxable capacity in the agricultural sector?.

We subscribe to the view that there should be equity in taxation. Agriculturalists and non-agriculturalists should be treated alike. It may be true that the physical exertion attached to agricultural income is more than non-agricultural income, but it is not a valid argument for differential tax treatment.

So also the argument that since agricultural sector receives special treatment under five year plans, tax collected from agriculture should be in accordance with the expenditure it receives through the five-year plans, cannot be subscribed to. Because, five year plans give special treatment to the agricultural sector because of its key position in the economy; because it supports a very large section of the population by providing livelihood and employment; because other sectors cannot grow unless growth is communicated from the agricultural sector. Therefore the amount of money spent on agriculture through five years plans cannot be the

yardstick for determining the tax to be collected from the agricultural sector, though it may be good that agriculture contributes to the nation building in accordance with the expenditure/support it receives from the exchequer. Tax to be collected from the agriculture should be determined by the ability to pay of the sector. If the expenditure through five-year plans increases the ability to pay of that sector, it can be expected to pay more tax.

There was and is a complaint that agriculture is not properly taxed; the successive governments do not make sincere efforts to tax agricultural sector; agricultural sector hide income and evade tax. There is also criticism that under taxed agricultural sector is acting as a safe haven for tax evaders from non-agricultural sector. These issues call for closer observations and analysis.

If agricultural sector is not taxed properly, it is as a result of the lack of effort on the direct taxes of the agricultural sector because as pointed out earlier indirect taxes affect both agriculture and non agricultural sector equally and it is accepted that indirect taxes in the state has reached a saturation point compared to the all India averages, and the south Indian states. This is also clear from the fact that sales tax contributes about 50 per cent of the total revenue of the state; 58.6 per cent of the total tax revenue; 74 per cent of the state's own tax revenue and 67 per cent of the own revenue of the state.

Here, an attempt is made to analyse the performance of direct taxes of agricultural sector to see whether a reasonable/considerable part of agricultural income is taxed away through direct taxes or not. Therefore, we concentrate on the direct taxes paid by the agricultural sector assuming that indirect taxes paid by the sector is at par with anybody else in the state including the salaried class.

The study tries to assess the tax performance of the Agricultural Income Tax and Land revenue, which is also called land tax and is the basic tax on land from

1957 onwards. Each tax would be taken separately and then together under the name Agricultural Taxes (AGT). Various statistical tools like ratios, percentages, compound growth rates, simple and multiple regressions are used.

Tax performance is assessed conventionally by finding out the

- (a) per capita tax burden,
- (b) tax income ratios and
- (c) growth rate of tax collected.

Together with these we use other measures such as per cultivator tax, elasticity of tax with agricultural income, and make simple and multiple regression to confirm our analysis. A study of the share of direct taxes of agricultural sector in total revenue, total tax, state's own tax and states own revenue is also attempted.

#### **4.2. Direct Taxes of Agricultural Sector in Kerala**

Agricultural Income Tax and Land tax are the two direct taxes that are imposed on the land. There are, other direct taxes such as Stamp Duty and Registration fee also that affect agricultural sector. But the impact of such taxes is mostly on non-agricultural sector and there is no clear-cut method to isolate the impact on the agricultural sector. There fore we concentrate on the land- based taxes only. Some researchers<sup>1</sup> like J S Arneja, Mahesh Pathak and Arun S Patel and Taxation Enquiry Committee arbitrarily fixed 20 per cent as being collected from agriculture and remaining from non-agriculture sector. We would desist from doing so for fear of arbitrariness. The damage would be rectified to an extent as we do not set aside any portion of the land revenue collected from non

---

<sup>1</sup> Government of Kerala, *Report of the Taxation Enquiry Committee*, 1969\_M.J.K. Thavaraj, Chairman Op.Cit., P. 81; J S Arneja, *Agricultural Taxation in Punjab Op.Cit.*,p.23; Mahesh Pathak and Arun S Patel, *Agricultural Taxation in Gujarat, Op.Cit.*, p.14.

agricultural sector to that sector and the entire land revenue is considered to be collected from the agricultural sector.

#### 4.2.1 Agricultural Income Tax in Kerala

Taxation of agricultural income in India is under the purview of the concerned state governments. Only a few states like Assam, Kerala, Tamilnadu, Karnataka, West Bengal and Tripura impose a direct tax on agricultural income at present. Many like Uttar Pradesh, Jammu and Kashmir, Rajasthan, Orissa etc. which had agricultural income tax have done away with it and some states like Bihar is playing hide and seek with it; is now on and then off. States like Gujarat, Haryana, Punjab, etc. never had Agricultural Income Tax.

A detailed account of the evolution of the agricultural income tax in Travancore, Cochin and Malabar and major changes, it has undergone is given in the Report of the Committee for Restructuring Agricultural Income tax Laws<sup>2</sup>.

The Kerala Agricultural Income Tax Act 1991 (Act 15, 1991) was a major development in the sphere of Agricultural Income Tax in Kerala. Receiving inspiration from the Agricultural Holdings tax concept of Raj Committee and following the recommendations of the Kaleeswaran Committee, the Act allowed the farmers to compound their income from land for purposes of paying tax. This was a major departure from the past for making the Agricultural Income Tax collection more simple and avoid bureaucratic harassment of the peasants.

The Act empowered the agriculturists who hold landed property within the state extending to not more than twenty hectares and deriving agricultural income

---

<sup>2</sup>Government of Kerala, *Report of the committee for Restructuring AIT Laws* 1988, N.Kaleeswaran, Chairman. Op.Cit., Chapter 1, pp.1-2.

For a historical account of AIT in India, see Government of India, Ministry of Finance, *Report of the Taxation Enquiry Commission 1953-54*, Vol.III, Chapter 3 (Chairman John Matthai).

apply to the Agricultural Income Tax Officer for permission to compound the agricultural income tax payable by him and to pay in lieu thereof a lump sum at the rates specified, on the planted area. Rates varied among crops, and zones (for cardamom among A, B and C).

None need to pay any tax on the first five hectares of his cultivation at present. No agricultural income tax shall be payable on any landed property exclusively cultivated with paddy, tapioca, plantain, ginger, ragi, pulses, sesame, vegetable, sweet potato, tubers sugarcane, jack, mango, pine apple, orchid, vanilla, turmeric and guava.

The crops that are taxed are coffee, cardamom (A, B and C zones) cashew, tea, pepper, coconut, rubber, cocoa, clove, cinchona, nutmeg, cinnamon and all other crops not specified. No tax shall be payable on the replanted area till the plants in this area start yielding.

The cultivators need to pay only 85 per cent of the agricultural income derived during the previous year when the tax payable exceeds eighty five per cent of the agricultural income derived during the previous year\*\*.

#### **(a) Growth Rate of Agricultural Income Tax**

Compound growth rate of Agricultural Income Tax is the first measure that is considered to appraise the tax performance of the agricultural sector. Compound growth rate will provide us with an index of the growth trend of Agricultural Income Tax. Table 4.1 shows that the decade 1971-80 is clearly distinct from other decades, with 17.93 per cent growth rate. The overall growth rate was 7.089 per cent from 1960-61 to 2000-01. The period 1991-2001 had a very dismal

---

\*\* For details on the existing AIT laws see Chapter VII section 7.2.1.

performance of just 1.27 per cent. This is in contrast to the growth rate of adjusted agricultural income (AAI).

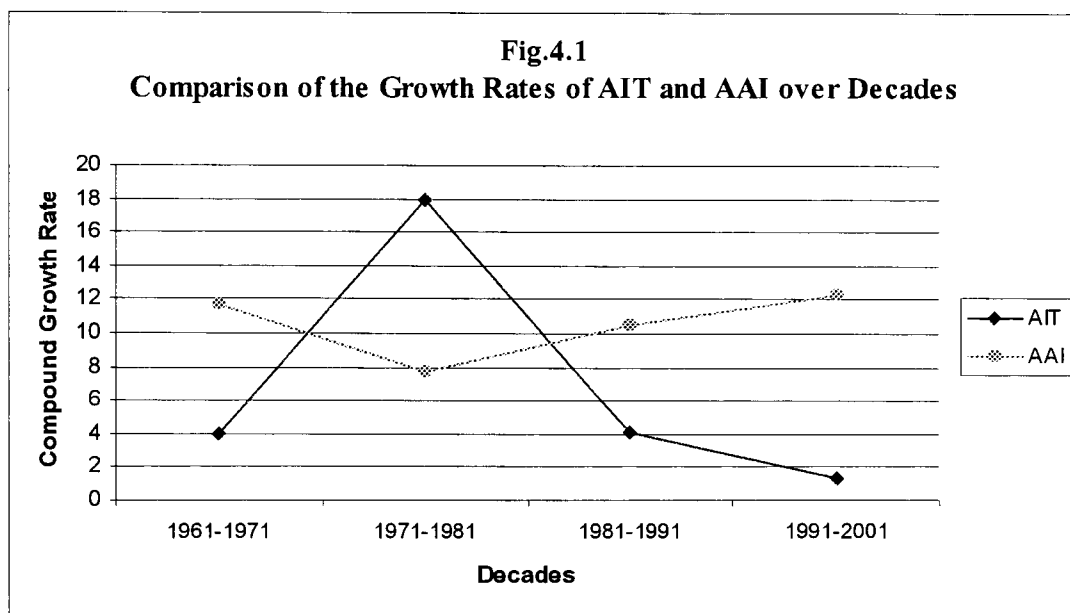
Table 4.1  
Compound growth of AIT and AAI

Year	Growth rate	
	AAI	AIT
1961-1970	11.68	3.98
1971-1980	7.67	17.93
1981-1990	10.43	4.12
1991-2001*	12.31	1.27
1961-2001	10.57	7.09

\*Note: Eleven years.

Source: Computed from various issues of RBI Bulletin

Fig. 4.1 gives a comparison of the compound growth rates of Agricultural Income tax and adjusted agricultural income in different decades. It is clear that compound growth rate of Agricultural Income Tax was sharply decreasing where as that of agricultural income improved in the recent decades.



Agricultural Income Tax had increasing growth rate in the seventies from where the decline was very sharp. It is interesting to note that growth rate of

Agricultural Income Tax increased when the growth rate of agricultural income declined and vice versa.

### (b) Per Cultivator Agricultural Income Tax

Another measure of tax performance is the per capita tax burden. Here, we measure the tax performance of the agricultural sector and per capita tax burden makes no sense as it includes the entire population, because all are not agriculturists and even all among the agriculturists need not pay Agricultural Income Tax. There fore we look at the per-cultivator tax burden, which takes into account only the farmers. We also do not include people employed in forestry, fishing, livestock, mining and quarrying among the agricultural population.

Per cultivator tax has increased from Rs 19.9/- to Rs 337.65/- in 2001. There is growth in per cultivator tax. But this is preceded by a fall in the number of cultivators from 11.8 lakhs in 1961 to 7.4 lakhs in 2001. So need not read much into the increase in per- cultivator tax. If the increase in per cultivator Agricultural Income Tax is the result of a fall in the number of cultivator it is not a reflection of the good performance of the tax.

Table 4.2  
Per Cultivator AIT

Year	Number of Cultivators	Growth Rate	Per Cultivator Tax (Rs.)	Growth Rate
1961	1178103	-	19.90	-
1971	1106663	-6.06	29.60	48.74
1981	887232	-19.83	127.30	329.39
1991	1015983	14.51	235.60	85.37
2001	740403	-27.12	337.65	43.31

Source: Computed from various issues of RBI bulletin and Census Reports

The year 1991 presents a good performance as, per cultivator Agricultural Income Tax showed a fairly good increase of about 85.37 per cent over 1981 when

the number of cultivators showed an increase of 14.51 per cent. All other years' increase in per cultivator Agricultural Income Tax was preceded by a fall in the number of cultivator and therefore the growth rate is not an indication of the good performance of the tax.

### (C) Ratio of Agricultural Income Tax to Adjusted agricultural income

Here, we measure the ratio of Agricultural Income Tax to adjusted agricultural income (AAI is one where income from agriculture alone is considered and income from allied activities, such as fishing, forestry, animal husbandry, mining and quarrying excluded). Per cultivator Agricultural Income Tax to Adjusted agricultural income also gives the same result. Table 4.3 shows that the ratio was 0.01 in 1960-61 and it fell very sharply to 0.002 in 2000-01. Only a very small fraction of the adjusted agricultural income is collected as Agricultural Income Tax.

The table shows the percentage of agricultural income collected as agricultural income tax fell except in 1981, when it showed a marginal increase. In 1961, 1 per cent of adjusted agricultural income was collected as agricultural income tax. It fell to 0.5 per cent in 1971 and increased a little to 0.9 per cent in 1981. But, still less than what was in 1961. Thereafter it fell. At present (2001) only 0.2 per cent of the agricultural income is collected as agricultural income tax.

Table 4.3  
Ratio of AIT to AAI

Year	Ratio
1960-1961	0.010
1970-1971	0.005
1980-1981	0.009
1990-1991	0.007
2000-2001	0.002

Source: Compiled from various issues of RBI bulletin, Census Reports and Economic Review

**(d) Performance of Agricultural Income Tax in relation to the revenue of the state**

Major revenue variables that give an idea about the revenue of the state are Total revenue, Total tax revenue, State's own Tax revenue and Own revenue. Here we try to analyse the performance of Agricultural Income Tax in relation to these variables. Table 4.4 shows that the share of Agricultural Income tax in all the above variables continuously and consistently declined in the period under study. The share was not only very small but also continuously decreased.

Table 4.4  
Ratio of AIT to Various Revenue Concepts

Year	AIT/TR	AIT/TTX	AIT/STX	AIT/OR
1957-58	0.067	0.104	0.137	0.089
1960-61	0.052	0.090	0.115	0.076
1970-71	0.022	0.033	0.048	0.036
1980-81	0.018	0.020	0.034	0.026
1990-91	0.010	0.013	0.018	0.015
2000-01	0.003	0.003	0.004	0.004

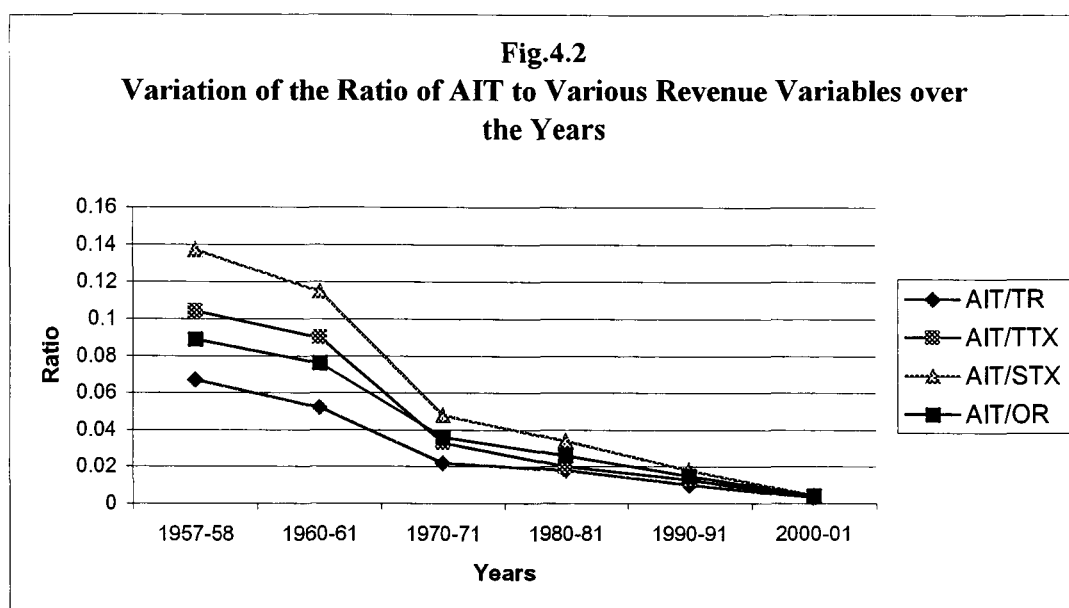
Source: Computed from various issues of RBI bulletin.

Agricultural Income Tax as per cent of total revenue was 6.7 per cent in 1957 and has declined to 0.3 per cent in 2000-01; as per cent of total tax revenue it was 10.4 in 1957-58 and is 0.3 in 2000-01; as per cent of state's own tax revenue it was 13.7 in 1957-58 and is 0.4 in 2000-01. Share in Own revenue of the state also has similar performance a fall from 8.9 per cent in 1957-58 to 0.4 per cent in 2000-01.

Therefore, it is clear that at the current state of affairs the existence or non-existence of Agricultural Income Tax would not have much impact on the resource mobilization in the state. It may be argued that agricultural income tax fell due to the better performance of others but the compound growth rate of Agricultural Income Tax shows that it had a declining growth rate in 1980s and in 1990s and

ratio of Agricultural Income Tax to adjusted agricultural income decreased considerably.

Figure 4.2 shows the variation of the ratio of Agricultural Income Tax to total revenue, total tax, own tax and own revenue of the state over the years. It is clear that the share of Agricultural Income Tax continuously fell over the years and is very little in 2000-01.



#### (e) Elasticity of Agricultural Income Tax

Elasticity of Agricultural Income Tax is measured to see how much the tax responds to changes in adjusted agricultural income.

Table 4.5  
Elasticity of AIT to AAI

Year	Elasticity
1961-62	1.01
1970-71	0.87
1980-81	1.32
1990-91	3.12
2000-01	-6.03

Source: Computed from various issues of RBI bulletin and Economic Review

Table 4.5 shows a positive response in all the years except in 2000-01, i.e., an increase of agricultural income led to an increase of agricultural income tax. The response varied among years. In 1961-62, a 1 per cent increase in agricultural income had led to a more than 1 per cent (1.01) increase in agricultural income tax. This was true for 1980-81 and 1990-91. In 1970-71, an increase of agricultural income by 1 per cent led to an increase in agricultural income tax by 0.87, i.e., there was positive elasticity but less than one. But in 2000-01, there is negative elasticity because a fall in agricultural income was followed by an increase in Agricultural Income Tax. This means that it is not the agricultural income that determines the Agricultural Income Tax collection.

#### (f) Result of Regression

In this section, an attempt is made to present empirically with the help of simple and multiple regression models.

$$Y = \alpha + \beta \ln x$$

where Y = Agricultural Income Tax and x = Adjusted agricultural income.

Table 4.6  
Regression model showing the influence of AAI on AIT

Years	$\alpha$	$\beta$	R <sup>2</sup>
1960-61 to 1970-71	158.5246 (6.444184)*	0.002768 (4.649297)	0.801433
1970-71 to 1980-81	-479.3348 (-1.614262)	0.012217 (3.971496)	0.636698
1980-81 to 1990-91	583.6168 (1.397158)	0.004028 (2.269296)	0.363944
1990-91 to 2000-01	2444.315 (3.80838)	-0.000357 (-0.50389)	0.027438
1960-61 to 2000-01	625.28 (4.88398)	0.001658 (6.081369)	0.486728

Note: Figures in brackets are t values; \* significant at 5%

R<sup>2</sup> in Table 4.6 shows that Adjusted agricultural income is not influencing the Agricultural Income Tax since 1980-81. The influence of Adjusted

agricultural income on Agricultural Income tax is minimum in 1990s. Till 1980-81, Adjusted agricultural income was a major determinant of Agricultural Income Tax especially in between 1960-61 and 1970-71. This confirms our finding that Agricultural Income Tax was influenced greatly by Adjusted agricultural income in the 1960s and the influence of agricultural income on agricultural income tax declined since 1980-81.  $R^2$  for the entire period from 1960-61 to 2000-01 is 0.486728. This means that the influence of agricultural income on Agricultural Income Tax is not considerable.

$$\ln Y = \alpha + \beta_1 \ln X_1 + \beta_2 \ln X_2$$

Where  $Y = \text{AIT}$ ;  $X_1 = \text{Agricultural Income}$ ;  $X_2 = \text{Net Cropped Area}$

Table 4.7

Regression model explaining the influence of AAI and Net cropped area on AIT

Years	$\alpha$	$\beta_1$	$\beta_2$	$R^2$
1980-81 to 1990-91	11015.64 (0.444603)	0.00527 (1.599952)	-0.004863 (-0.421456)	0.418785
1990-91 to 2000-01	75.4288 (0.3551)	-0.16009 (-0.5531)	-4.4881 (-0.3086)	0.051500
1980-81 to 2000-01	-43.34 (-0.311)	0.199 (1.116)	3.29 (0.342)	0.270000

Note: (i) We have taken precaution for multicollinearity.

(ii) Figures in brackets are t values

$R^2$  in Table 4.7 shows that Net-cropped area and Agricultural income together are not able to influence Agricultural Income Tax in any significant way in the state in the period under study.

$$\ln Y = \alpha + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3$$

Where  $Y = \text{AIT}$ ;  $X_1 = \text{Agricultural Income}$ ;  $X_2 = \text{NSDP}$ ;  $X_3 = \text{Net Cropped Area}$

Table 4.8

Regression model showing the influence of AAI, NSDP and Net cropped area on AIT

Years	$\alpha$	$\beta_1$	$\beta_2$	$\beta_3$	$r^2$
1979-80 to 1990-91	11776.71 (0.437602)	0.000346 (0.128513)	0.004001 (0.381826)	-0.00519 (-0.415579)	0.417982
1991-92 to 2000-01	-76130.04 (-1.003304)	0.001309 (1.227448)	-0.008288 (-1.290245)	0.035838 (1.042147)	0.233180
1979-80 to 2000-01	-39903.66 (-1.875856)	0.000657 (1.439496)	-0.003654 (-1.330136)	0.01898 (1.940188)	0.317591

Note: (i) We have taken precaution for multicollinearity.

(ii) Figures in brackets are t values.

Table 4.8 shows that Agricultural income, Net State Domestic Product and net-cropped area fail to explain the change in Agricultural Income Tax.

$$\ln Y = \alpha + \beta_1 X_i$$

Where Y = STX;  $X_i$  = AIT

Table 4.9

Regression model showing the influence of Agricultural Income Tax on STX

Years	$\alpha$	$\beta_1$	$R^2$
1957-58 to 2000-01	-31328.82 (2.456834)	129.3877 (-0.19434)	0.477023
1960-61 to 1970-71	-3573.31 (-2.03446)	28.96466 (4.456409)	0.688145
1970-71 to 1980-81	251.4003 (0.124156)	25.23545 (9.325272)	0.895791
1980-81 to 1990-91	13528.5 (0.445435)	41.96543 (2.154872)	0.340344
1990-91 to 2000-01	395724.6 (2.456834)	-14.05088 (-0.194348)	0.004699

Note: Figures in brackets are t values.

Agricultural Income Tax (Agricultural Income Tax) did not have a major role (Table 4.9) in determining the size of State's Own tax revenue (STX) if we take the entire period from 1957-58 to 2000-01. But in the 1960s and 1970s Agricultural Income Tax had an important role and in 1980s and 1990s the role of Agricultural Income Tax fell sharply in determining the size of state own tax revenue.

Tables 4.10 and 4.11 show that this observation about the relation between Agricultural Income Tax and State's own tax revenue holds good in the relation between Agricultural Income Tax and Total tax (TTX) and Agricultural Income Tax and Total revenue (Total Revenue).

$$\ln Y = \alpha + \beta_1 X_i,$$

Where Y = TTX; X<sub>i</sub> = AIT

Table 4.10

Regression model showing the influence of Agricultural Income Tax on TTX

Years	$\alpha$	$\beta_1$	R <sup>2</sup>
1957-58 to 2000-01	-39063.31 (-1.074219)	168.351 (6.32278)	0.487665
1960-61 to 1970-71	-5415.952 (-2.052103)	41.34032 (4.232888)	0.665643
1970-71 to 1980-81	1047.814 (0.296663)	34.45254 (7.298756)	0.855472
1980-81 to 1990-91	22974.33 (0.556513)	54.94968 (2.075821)	0.323767
1990-91 to 2000-01	525739.8 (2.508687)	-35.86621 (-0.38396)	0.016117

Note: Figures in brackets are t values.

$$\ln Y = \alpha + \beta_1 X_i$$

Where Y = TR; X<sub>i</sub> = AIT

Table 4.11

Regression model showing the influence of Agricultural Income Tax on TR

Years	$\alpha$	$\beta_1$	R <sup>2</sup>
1957-58 to 2000-01	-43376.65 (-1.01889)	205.5215 (6.593211)	0.508602
1960-61 to 1970-71	-9190.08 (-2.531918)	69.12756 (5.146595)	0.746389
1970-71 to 1980-81	4459.09 (1.243091)	47.1243 (9.829987)	0.914796
1980-81 to 1990-91	31059.55 (0.641129)	71.70588 (2.308327)	0.371876
1990-91 to 2000-01	633810.6 (2.800098)	-25.77657 (-0.253707)	0.007982

Note: Figures in brackets are t values.

#### 4.2.2 Land Tax

Land tax is also called land revenue and basic tax. Levying of land revenue came into existence in the 18<sup>th</sup> century in places, which came together to constitute Kerala. Travancore had started imposing it in 1750-51, in Cochin in 1762 and in the Malabar region it was imposed in 1760<sup>3</sup>. Land revenue system was unified in

<sup>3</sup>Government of Kerala, *Report of the Taxation Enquiry Committee* 1969, M.J.K.Thavaraj, Chairman. Op.Cit., p.74.

1956 applying it to Travancore – Cochin part of Kerala. Later, this act was made applicable to Malabar region also in 1957.

Due to court interventions and many legislations final Kerala Agricultural Land Tax Act was included in the 9<sup>th</sup> Schedule of the constitution. The Kerala land tax Act 1961 (Act 18 of 1961) empowers the state government to levy tax on land. There had been many changes and amendments to the Act and at present we have the Act in the form as amended in 1998, by order 29.07.98, No. Legi.A2/98.

The rate of tax imposed as per the above amendment is as follows:

In municipal corporations, land up to 2 Ares\*\* pay Rs.2 per Are; land above 2 Ares have to pay Rs. 4 per Are. In municipalities the rate is up to 6 Ares of land Rs. 1 per Are and land above 6 Ares will have to pay Rs. 2 each per Are. In Gramma panchayats, the rate structure is Rs.0. 50/ per Are up to the land holding of 20 Ares and Rs. 1 per Are above that size (20 Ares) of land holdings.

Plantations (tea, cardamom, rubber, coffee, pepper, areca nut and coconut) were subjected to plantation tax through Kerala Plantation (Additional Tax) Rules, 1960<sup>4</sup> and now stand repealed through Agricultural Income Tax Act 1991 (Act 15), which, provided for compounding of agricultural income for people who have land between 3 and 20 hectares and opted for compounding.

Land tax is collected through Village offices in Kerala. Land revenue includes also receipts from sale on government estates, sales proceeds of wasteland and other sale proceeds<sup>5</sup>.

---

\* 1 Are is equal to 2.47 cents.

<sup>4</sup> Government of Kerala, *The Kerala Plantations (Additional Tax Rules, 1960) as on 8<sup>th</sup> November 1960*, (Thiruvananthapuram: Government Press, 1961), pp.5-7.

<sup>5</sup> Government of Kerala, *Explanatory Memorandum on the budget for 2002-2003*, (Thiruvananthapuram: Government Press, 2003).

### *Performance of Land Tax*

Performance of land tax is assessed in terms of growth rate, per holding tax ratio of Land revenue to Adjusted agricultural income, to total revenue, total tax etc., elasticity of Land revenue to agricultural income and also to net cropped area.

#### **(i) Growth of Land Revenue**

The compound growth rate of land revenue was computed for the period from 1960-61 to 2000-01. Table 4.11 summarizes the findings. Land revenue appears to have a better performance. There was a growth rate of 8.9 per cent over the period under study.

Table 4.12  
Compound Growth rate of Land tax

Year	Growth rate
1961-1970	5.09
1971-1980	9.75
1981-1990	15.99
1991-2000	14.26
1961-2001	8.90

Source: Same as Table 4.1

The highest growth rate was in between 1980-81 to 1990-91. The last decade (1991-2000) also has a similar performance of 14.26 per cent. The first decade (1960-61 to 1970-71) had comparatively poor performance with 5.09 per cent growth rate.

#### **(ii) Per Holding and Per Hectare Land Revenue**

We compute per holding and per hectare revenue to see the tax burden of the cultivators with different size of holdings. Per holding land revenue also has its limitation as a measure of tax burden of the agricultural sector, since land is held not only by the agriculturists and so land revenue is paid also by non-agriculturists. But, per holding land revenue will reflect the tax burden per

holding owned, and per hectare land revenue will tell the tax burden borne by each hectare of land held by the owner.

Per holding tax is computed by dividing total land revenue collected with the total number of holding. Per hectare land tax is calculated by dividing total land revenue with total area of land held by different class groups. Table 4.13 shows the per-holding and per hectare land revenue.

Table 4.13  
Per holding and Per hectare Land tax in Kerala. (Rs)

Year	Per holding Land Tax	Per hectare Land Tax
1985-86	11.9	32.88
1990-91	20.5	61.93
1995-96	37.7	138.23

Source: Computed from various issues of RBI bulletin and Statistics for Planning.

Per holding land revenue had a more than 3 fold increase between 1985-86 and 1995-96\* where as per hectare land revenue increased from Rs. 32.88/- in 1985-86 to Rs.138.22/- in 1995-96 showing a more than 4 fold increase. So tax burden per holding and per hectare showed a huge increase in ten years. The per holding land tax does not show a growth rate equal to that of per hectare land tax, because of the increase in the number of holdings over this period due to increase in population and the concept of nuclear family system in the state.

### **(iii) Ratio of Land Revenue to Adjusted Agricultural Income**

Ratio of land tax to agricultural income shows a mild increase since 1980-81 onwards after decline from 0.006 in 1960-61. Table 4.14 shows that ratio in 2000-01 though showing an increase has not caught up with what was in 1960-61.

---

\* Latest Agricultural census was conducted in 1995-96 and there fore details about size and number of holdings in Kerala are available only for that year.

Table 4.14  
Ratio of Land tax to AAI

Year	LR/AI
1960-61	0.006
1970-71	0.002
1980-81	0.002
1990-91	0.003
2000-01	0.004

Source: Same as Table 4.12

This meant that percentage of agricultural income collected, as land tax was 0.6 in 1960-61. It had fallen to 0.2 per cent in 1970-71, i.e., to one-third of what was in 1960-61. There was a mild increase to 0.3 in 1990-91 and further to 0.4 in 2000-01. Thus, it means that 1960-61 land tax had the best performance in terms of mobilization of revenue from agricultural income.

**(iv) Share of Land Revenue in the Total Revenue and Tax Revenue of the State**

This analysis will help us to understand whether the contribution of the land tax is worthwhile. It will also help us to conclude as to whether performance of land tax was at par with the performance of other revenue variables. From Table 4.15, it is clear that land revenue has a very negligent contribution to the state exchequer.

Table 4.15  
Ratio of Land Tax to Various Revenue Concepts

Year	LR/TR	LR/TTX	LR/STX	LR/OR
1957-58	0.042	0.066	0.087	0.057
1960-61	0.032	0.056	0.071	0.047
1970-71	0.008	0.012	0.017	0.013
1980-81	0.005	0.007	0.009	0.007
1990-91	0.005	0.006	0.008	0.007
2000-01	0.005	0.006	0.007	0.006

Source: Computed from various issues of RBI bulletin

The share of land revenue was on the decline since 1957-58. It was just 4.2 per cent of the total revenue, 6.6 of the total tax revenue, 8.7 per cent of the states own tax revenue and 5.7 per cent of the state's own revenue in 1957-58. The contribution continuously declined and it is less than 1 per cent in respect of all the above variables in 2001. This very low share (less than 1 per cent) of Land revenue is observed ever since 1970-71.

#### (v) Elasticity of Land Revenue

Elasticity of land revenue to agricultural income shows a mixed picture measuring that land revenue does not have a one to one relation with the agricultural income. Table 4.16 shows this. 1960-61 and 2000-01 have elasticity equal to one or more than one. 1990-91 revealing a positive but less than unit elasticity; other years present negative elasticity.

Table 4.16  
Elasticity of Land tax to AAI

Year	Elasticity
1961-62	1.77
1970-71	-6.78
1980-81	-1.59
1990-91	0.06
2000-01	1.00

Source: Computed from various issues of RBI bulletin and Economic Review

This performance of Land revenue is not surprising considering the lukewarm effort made by the village offices, which are responsible to collect land revenue. Village offices have a number of functions, which are vital to the day-to-day life of the individuals of the village, and are flooded with these responsibilities. They get little time to involve in tax collection. Many a time taxes of many years are collected at one lot when the land- owner wants a tax receipt for some other functions. Neither the village offices nor the landowners

know when the tax was last paid. Therefore, the village offices very often charge an amount arbitrarily, which will very often be less than the due.

Dismal performance of the land tax is also due to the delay in rate revision by the government. Last revision was made in 1998.

#### **4.2.3 Total Agricultural Taxes (AGT)**

Total direct tax's burden borne by the agricultural sector is the sum total of the burden of agricultural income tax and land tax. We call the total of Agricultural Income Tax and land revenue as Agricultural taxes (AGT). There are other direct taxes like stamp duty and registration fee borne by the agricultural sector. But, we exclude them for reasons spelt out earlier.

To assess the burden of the total Agricultural taxes (AGT) on the agricultural sector we look into the compound growth rate, ratio of taxes to agricultural income, contribution of Agricultural Taxes to the state exchequer, per cultivator tax, elasticity of the tax, etc.

##### **(a) Growth Rate of the Total Direct Taxes (AGT) on Agricultural Taxes**

A study of the growth rate of the total taxes on agricultural sector would reveal the growth of the tax burden of the sector as a result of agricultural taxes. Table 4.17 summarises the compound growth of Agricultural Taxes from 1960-61 to 2001.

Table 4.17  
Compound Growth rate of AGT

Year	Growth rate
1961-1970	4.34
1971-1980	15.11
1981-1990	7.87
1991-2000	5.89
1961-2001	7.98

Source: Same as Table 4.16

Average growth rate over 1960-2001 is 7.98. This is greater than that of Agricultural Income tax and less than that of Land tax. 1971-80 witnessed sharp growth, as it was the case in Agricultural Income Tax compared to highest growth rate of Land revenue in 1981-90. Growth rate was small in the last decade. Lowest growth rate is observed in between 1961 and 1970.

### (b) Per Cultivator Agricultural Taxes (AGT)

Per cultivator tax can give us some idea about the tax burden of the agricultural sector. Per capita tax burden is not estimated for reasons stated above<sup>6</sup>. We see that per cultivator Agricultural Taxes increased from Rs. 32.3/- in 1961 to Rs. 926.25/- in 2001, i.e., a four-fold increase in the burden.

Table 4.18  
Per cultivator AGT (Rs.)

Year	AGT
1961	32.30
1971	40.00
1981	163.40
1991	345.10
2001	926.25

Source: Computed from various issues of RBI bulletin and Census Reports.

There is sharp increase from 1991 to 2001. This is due to the fall in the number of cultivators from 1015983 in 1991 to 740403 in 2001 i.e. There is a 27.12 per cent reduction in the number of cultivators.

Per cultivator Agricultural taxes as ratio of per cultivator agricultural income (Table 4.19) remained almost the same (around 0.01) in all the years except in 2001, when it was 0.006. This signifies a sharp fall of 40 per cent from 1991.

<sup>6</sup> When we discussed AIT in Section 4.2.1(b)

Table 4.19  
Ratio of Per cultivator AGT to  
Per cultivator AI

Year	Ratio
1961	0.016
1971	0.016
1981	0.011
1991	0.010
2001	0.006

Source: Same as Table 4.18

### (c) Ratio of Agricultural Taxes to the Total Revenue of the State

Now, we analyse the performance of Agricultural taxes (AGT) in relation to other revenue and tax variables. This helps us to compare the performance of Agricultural Taxes to those of other variables. We see a very poor performance of Agricultural taxes.

Table 4.20  
Ratio of Agricultural Taxes

Years	AGT/TR	AGT/TTX	AGT/STX	AGT/OR
1957-58	0.109	0.170	0.224	0.146
1960-61	0.086	0.145	0.187	0.123
1970-71	0.030	0.045	0.065	0.049
1980-81	0.023	0.029	0.043	0.033
1990-91	0.015	0.019	0.026	0.023
2000-01	0.007	0.009	0.011	0.010

Source: Computed from various issues of RBI Bulletin.

Share of Agricultural Taxes in total revenue was 10.9 per cent (0.109); 17 per cent (0.17) of total tax revenue; 22.4 per cent (0.224) of state's own tax revenue and 14.6 per cent of state's own revenue in 1957-58. The share of Agricultural Taxes consistently decreased over the years and is only 0.7 per cent of total revenue, 0.9 per cent of total tax, 1.1 per cent of state's own tax revenue and 1.00 per cent of state's own revenue in 2001.

We also estimate the share of Total revenue, Total tax and State's Own tax in the Net Domestic Product and the share of Agricultural taxes in the agricultural income. Table 4.21 shows that total revenue mobilization was about 11 per cent of the Net Domestic Product in 1960-61 and increased to 15 per cent in 2000-01. Total tax mobilised was about 6 per cent of the Net Domestic Product in 1960-61 and is now 12 per cent in 2000-01.

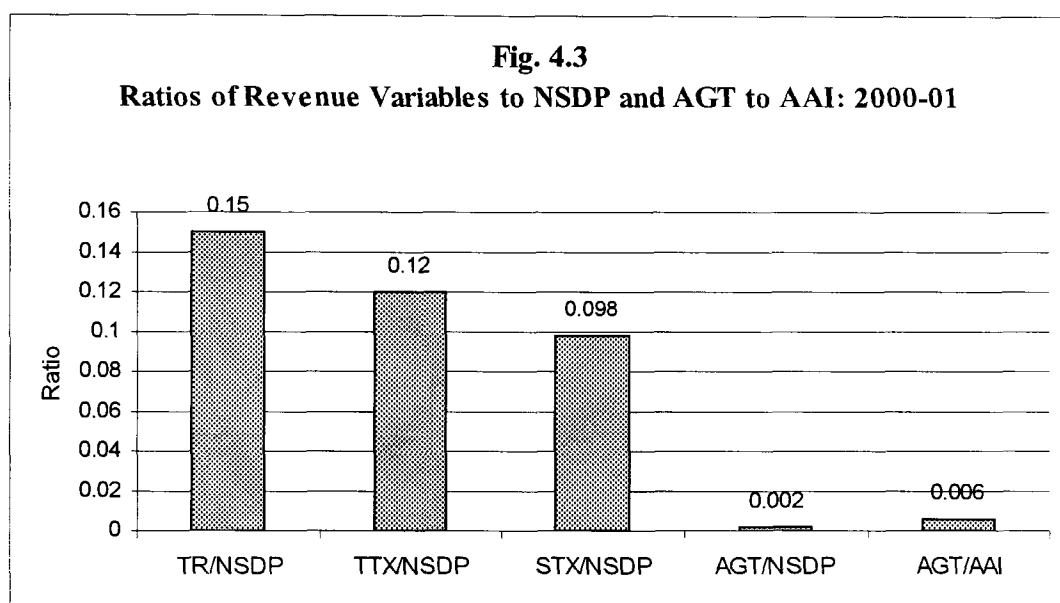
State's own tax revenue also almost doubled from 5 per cent to 9.8 per cent in the same period where as share of Agricultural taxes in agricultural income decreased from 1.6 per cent in 1960-61 to just 0.6 per cent in 2000-01. Share of agricultural income collected as agricultural taxes is abysmally low all throughout the years. It is to be noted that only the share of Agricultural taxes in agricultural income decreased from what it was in 1960-61, while all others increased their shares in Net Domestic Product.

Table 4.21  
Comparison of ratio of AGT to AAI with ratios of TR, TTX,  
STX and OR to NSDP

Year	TR/NSDP	TTX/NSDP	STX/NSDP	AGT/NSDP	AGT/AI
1960-61	0.11	0.06	0.050	0.010	0.016
1970-71	0.12	0.08	0.060	0.005	0.010
1980-81	0.17	0.13	0.090	0.009	0.010
1990-91	0.19	0.15	0.110	0.007	0.010
2000-01	0.15	0.12	0.098	0.002	0.006

Source: Computed from various issues of RBI bulletin

Fig. 4.3 shows the ratio of Total revenue, Total tax, State's own tax and Agricultural taxes (AGT) to Net State Domestic Product and Agricultural taxes to agricultural income in 2000-01. Share of agricultural taxes are only a very small fraction of the domestic product. Ratio of Agricultural taxes even to agricultural income is negligible.



#### (d) Responsiveness of the Direct Taxes of Agricultural Sector

Now, let us see what is the responsiveness of the direct taxes of agricultural sector to the agricultural income. A good tax system must be responsive to the tax base. Table 4.22 shows that there are many years in which tax system showed negative elasticity. 2000-01 showed an elasticity of  $-3.20$  to agricultural income. This negative elasticity is because of the fact that agricultural income fell from the previous year and total agricultural taxes collected (AGT) increased.

Table 4.22  
Elasticity of AGT to AAI

Year	Elasticity
1961-62	1.31
1970-71	-0.75
1980-81	0.84
1990-91	1.94
2000-01	-3.20

Source: Computed from various issues of RBI  
bulletin and Economic Review

It is not surprising to have such an elasticity because even Agricultural Income Tax does not have agricultural income as its tax base, because Agricultural

Income Tax's base now is partly the area of land owned by the person. Therefore, not only land revenue but also major portions of the Agricultural Income Tax, which together constitute Agricultural taxes have area of land as their base; so Agricultural taxes will not necessarily be responsive to Adjusted agricultural income.

#### **4.3 Direct Taxes of Agricultural Sector among Selected States in India**

In this section, we attempt to compare the direct taxes of the agriculture sector in a few selected states in relation to their total revenue, total tax revenue and states own tax revenue.

Comparison is made with South Indian states and Assam, Haryana and Punjab. Comparison is made among the South Indian states for their geographical proximity, to know how similar are the near ones with regard to the direct taxes on agriculture.

Assam is selected for comparison because it is a state where agricultural income tax is prominent and plantation sector occupies an important role in the cropping pattern. Kerala shares these two features of Assam. In both states, Agricultural Income Tax existed right from the constitution of the State and was an important source of revenue in the earlier years.

Punjab and Haryana are the two Indian states where the so-called agricultural revolution improved the income of the peasants considerably. Therefore, it would be logical to compare the rich agricultural states' tax performance with that of Kerala.

Different direct taxes existed in these states on the agricultural sector. In Assam, there existed only Agricultural Income Tax and Land revenue and they continue to exist even now. In Haryana, land revenue is the only direct tax that

exists on the agricultural sector now. There existed taxes like cess on sugarcane, surcharge on cash crops and purchase tax on sugarcane. But these do not exist now. In Punjab also, land revenue is the only direct tax that is imposed on agricultural sector at present. There once existed taxes like surcharge on sugarcane and cess on cash crops.

In Andhra Pradesh also, land revenue is the only direct tax on agricultural sector. There too existed taxes like surcharge or cess on sugarcane and purchase tax on sugarcane. In Karnataka, there exists Agricultural Income Tax and Land revenue. Earlier there existed also the surcharge on sugarcane. In Tamil Nadu, both Land revenue and Agricultural Income Tax on selected crops on compounding basis are levied. In the 1960s and 1980s, there were also taxes like surcharge and purchase tax on sugarcane.

In Kerala also, there are only Agricultural Income Tax and Land revenue on the agricultural sector. There were other taxes like betterment levy, irrigation charges and the plantation tax. There are also other taxes, which are directly paid by the sector; but for reasons stated earlier (Section 4.2) we consider only two taxes –Land revenue and Agricultural Income Tax as truly agricultural.

#### **4.3.1 Direct Taxes on Agricultural Sector and Total Revenue of the States**

We have seen above the various direct taxes that are imposed on agricultural sector in different states. All direct taxes that exist at present are totalled to get the Direct taxes on Agricultural sector in each state.

Direct taxes on agricultural sector as percentage of total revenue of the selected states are given in Table 4.23. In 1960-61, all the states depended to a considerable extent on the agricultural sector as a source of revenue.

Table 4.23  
Direct Taxes on Agriculture as Percentage of Total revenue of Selected States

Year	Kerala	Andhra P.	Karnataka	Tamil N.	Assam	Haryana	Punjab
1960-61	8.62	13.7	8.38	9.17	24.25	-	6.95
1970-71	3.03	8.14	3.03	1.95	9.22	2.37	1.11
1980-81	2.26	2.97	1.86	0.99	3.54	0.85	0.43
1990-91	1.46	0.54	0.58	0.68	5.82	0.05	0.18
2000-01	0.73	0.60	0.45	0.33	1.91	0.18	0.08

Source: Calculated from Various Issues of RBI Bulletin, Economic Review, National Account Statistics of India, EPW, Research Foundation (1998)

In Assam, it was as high as 24.25 per cent followed by Andhra Pradesh with 13.7. In Kerala, it was 8.62 per cent. In all the states, there is a tendency of decline except in Assam where in 1990-91 it showed an increase. Assam still looks to agriculture sector as a source of revenue. Rs.10790/- lakhs collected as direct taxes constitute about 2 per cent of the total revenue of Assam even in 2000-01. Kerala follows with 0.73 per cent of the total revenue.

Haryana and Punjab's agricultural sector contribute only very little to their total revenue: 0.18 and 0.08 per cent respectively in 2000-01. Ever since 1970-71 this was the case for both the states: direct taxes on agriculture sector contributing less than 1 per cent of the total revenue.

Though the South Indian states, are a shade above, they too are not much different, Tamil Nadu with 0.33, Karnataka with 0.45 and Andhra Pradesh with 0.6 per cent of their total revenue. Comparatively Kerala's dependence on agriculture sector is largest among the South Indian states.

#### 4.3.2 Direct Taxes on Agriculture and Total Tax Revenue

Next we would compare the share of Direct Taxes on agriculture in the total tax revenue of different states. Assam's Direct taxes on Agriculture as percentage of total tax revenue, is far above all other states under study with 31.21 per cent in

1960-61 and 3.49 per cent in 2000-01 (Table 4.24). Punjab and Haryana are the states that are least dependent on agriculture with 0.13 per cent and 0.25 per cent respectively.

Table 4.24  
Direct Taxes of Agriculture Sector as Percentage of Total Tax Revenue

Year	Kerala	Andhra P.	Karnataka	Tamil N.	Assam	Haryana	Punjab
1960-61	14.52	20.62	15.60	15.38	31.21	—	12.35
1970-71	4.50	10.96	4.50	2.90	19.81	3.52	1.62
1980-81	2.97	40.29	2.63	1.37	11.27	1.33	0.56
1990-91	1.92	0.76	0.75	0.83	11.39	0.07	0.17
2000-01	0.87	0.80	0.57	0.40	3.49	0.25	0.13

Source: Same as Table 4.23.

Kerala comes next to Assam with 0.87 per cent followed by Andhra Pradesh with 0.8 per cent. In 1960-61, Kerala was the last but one state; Punjab being the last. In that year all the states' tax revenue including that of Punjab (12.35 per cent) had considerable dependence on agricultural sector. It is also to be noted that in all the states share of Direct taxes on agriculture in total tax revenue is on a continuous decline and the fall was very sharp from 1960-61 on wards. Rate of fall is comparatively lower in Assam and sharper in Punjab. Even in Assam, the contribution of agricultural sector is just 1/10<sup>th</sup> of what it was in 1960-61.

#### 4.3.3 Direct Taxes on Agriculture and State's own Tax Revenue

Direct taxes on agriculture as per cent of States' own tax also show a consistent decline in all the states; sharpest fall observed in Punjab and smaller in Assam (Table 4.25). In 1960-61, 43.79 per cent of Assam's own tax revenue was by direct taxes of agriculture. Even in case of Punjab's own tax revenue, 16.14 were from these taxes. There is a sharp fall there after. At present only 7.64 per cent of Assam own tax revenue is from direct taxes on agricultural sector followed

by Kerala and Andhra Pradesh with 1.1 per cent each. The change from 1960-61 to 2000-01 is marked by severe decline in the case of all the states.

Table 4.25  
Direct Taxes on Agriculture as percentage of State's own Tax Revenue

Year	Kerala	Andhra P.	Karnataka	Tamil N.	Assam	Haryana	Punjab
1960-61	18.66	27.24	20.55	20.56	43.79	-	16.14
1970-71	6.52	15.57	6.16	4.02	28.95	N A	1.96
1980-81	4.31	6.46	3.74	1.99	28.11	1.68	0.69
1990-91	2.62	1.08	0.97	1.10	24.62	0.09	0.26
2000-01	1.10	1.10	0.74	0.49	7.64	0.27	0.15

Source: Same as Table 4.23.

#### 4.3.4. Direct taxes on Agriculture and Agricultural income

Another measure of tax performance of Agricultural sector is the ratio of Direct taxes of agricultural sector to the agricultural income of concerned states. It is clear from Table 4.26 that agricultural income including income from allied activities collected as direct taxes on the sector of all the states fell considerably between 1980-81 and 2000-01. The fall was sharpest in Punjab and Andhra Pradesh. The tax in 2000-01, as percentage of agricultural income is just 27 per cent of what it was in 1980-81. The fall is lowest in Assam i.e., it is 59 per cent of what was in 1980-81.

Table 4.26  
Direct Taxes on Agriculture as Percentage of Agriculture Income\*\*

Year	Kerala	Andhra P.	Karnataka	Tamil N.	Assam	Haryana	Punjab
1980-81	1.12	1.19	0.74	0.72	1.82	0.24	0.11
1985-86	1.30	0.28	0.38	1014	3.56	0.14	0.09
1990-91	0.99	0.26	0.33	0.66	2.97	0.02	0.04
1995-96	0.57	0.26	0.49	0.23	1.38	0.01	0.02
1999-00	0.54	0.35	0.29	0.31	1.38	0.03	0.02
2000-01	0.40	0.32	0.25	0.29	1.08	0.07	0.03

Note: \*\* Agricultural income includes income from allied activities also. Thus it is different from the adjusted agricultural income.

Source: Same as Table 4.23.

It is also clear that only a very small fraction of agricultural income is mobilised as taxes on agricultural taxes. Even in Assam it is only 1.08 per cent in 2000-01; followed by Kerala. In Punjab it is only 0.03 per cent. Even in the early eighties it was less than one per cent except for Assam, Andhra Pradesh and Kerala.

#### **4.4 Conclusion**

The analysis shows that by all the conventional standards direct taxes on agricultural sector in Kerala had a dismal performance. Land revenue had a comparatively better performance, showing an average growth rate of 8.9 per cent from 1960-61 to 2000-01. Contribution of agricultural taxes to the state revenue also decreased considerably in relative terms. The fall was the sharpest between 1960-61 and 1970-71 and there is no improvement there after. Agricultural Income Tax comes about 0.2 per cent of adjusted agricultural income, and land revenue is about 0.4 per cent of the adjusted agricultural income. This is in contrast to the 17.1 per cent contribution of Agricultural sector to the Net Domestic Product in 2000-01.

Comparison among selected states show that contribution of agricultural taxes to the revenue of the respective states fell sharply and the contribution is the highest in Assam followed by Kerala. This is true also for the percentage of agricultural income including income from allied activities mobilised as direct taxes on agricultural sector. It is 1.08 per cent for Assam and 0.4 per cent of Kerala; all other states considered are below this. Punjab and Haryana are far below in all respects.

Performance of the direct agricultural taxes of Kerala is better among the South Indian states and is second to Assam among all the selected states.

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

101

NB 4621

336.27862

TH  
JOM/A

## CHAPTER V TAX BURDEN OF AGRICULTURAL SECTOR IN RELATION TO ITS TAXABLE CAPACITY



### 5.1 Introduction

The foregoing analysis revealed that performance of the direct taxes on the agricultural sector was poor as the rates of growth of the different taxes were low, tax income ratio was low, contribution to the state exchequer was poor and so on. The above analysis conveys the idea that agricultural sector is taxed only lightly but these estimates or calculations are based on secondary data. This is not specific and presents only a general picture of the sector and situation.

To conclude as to whether a sector is taxed lightly or not, we must know the tax burden of the payers in relation to their capacity or ability to pay. If one is not paying tax according to one's ability, one is under taxed. Therefore, an estimation of the taxable capacity and the taxes actually paid by an assessee is necessary to evaluate his performance. We try to do the same in this chapter.

We also try to compare and assess the inter-sectoral and intra-sectoral equity in tax burden. Inter-sectoral comparison is made between the taxpayers of salaried class and agricultural sector with different levels of income; intra-sectoral comparison is made among agriculturists who cultivate different crops.

### 5.2 Ability to Pay and Taxable Capacity

Taxable capacity and ability to pay tax are very often used interchangeably. Before trying to assess the so-called taxable capacity we should know what does the concept taxable capacity signify. The concept capacity to pay tax is a common phrase but a dim and confused conception. According to Philip E. Taylor, "that individual who can with least personal sacrifice give up a dollar from his income

is the individual among all individuals who has the greatest ability to pay the next dollar in taxes”<sup>1</sup>.

Taxable capacity as we said is a common phrase but a dim and confused conception. According to Josiah Stamp, taxable capacity is total production minus the amount required to maintain the population at subsistence level. He modifies his description of it as the margin of total production over total consumption. He argues that taxable capacity depends on distribution of income; higher the inequality of income distribution larger the taxable capacity.

Finding it difficult to define taxable capacity Drummond Fraser opined that “taxable capacity of a nation is surely reached when tax payers are forced to borrow from the bank to pay their taxes”.

Taxable capacity, according to D.H.Dalton, is not an absolute or fixed amount<sup>2</sup>. There are two senses of the term:

- (i) absolute taxable capacity of a single community (person),
- (ii) the relative taxable capacity of two or more communities (persons)

Thus we ask (i) how much can a sector or an individual be taxed without producing various unpleasant effects. When these unpleasant effects result from the operation of the tax system, it is possible to consider that taxable capacity has been exceeded in an absolute sense, or (ii) in what proportions should two or more communities contribute, by taxation.

---

<sup>1</sup> Philip E Taylor, *The Economics of Public Finance*, (New Delhi: Oxford & IBH Publishing Co. 1961),297.

<sup>2</sup> Hugh Daltorn, *Wealth and Taxable Capacity*,( New Delhi: Allied Publishers Pvt. Ltd,1954), pp.119-120.

Every tax has an unpleasant effect; then there is difference between capacity to pay without suffering and capacity to pay regardless of suffering. In the first case only rich can pay tax, second case is limited by the tax payers' total resources. Taxable capacity lies somewhere between these two but not exactly known. That is why Edwin Cannon answers the question of how to ascertain taxable capacity – in a simple word 'no how'.

According to Dalton relative taxable capacity may be given an intelligible meaning. Burden is to be distributed among different persons according to their ability to pay. (Ability to pay may be renamed taxable capacity). So the proportion paid by the richer contributors should increase and those paid by the poorer should diminish.

According to him absolute taxable capacity is a myth. In the interest of clear thinking, it would be well that phrase 'taxable capacity' should be banished from all serious discussions of public finance<sup>3</sup>. Thus, taxable capacity has an absolute content but not definable or quantifiable. Most what we can say about it is that the unpleasant affect of tax system should be minimum. It has a relative content: rich should bear more burden.

Thus, an identification of a certain percentage of income as potential tax or fixing certain amount/level of income as the basis of the ability to pay tax or identifying certain people having an income above a certain level as people having taxable capacity is arbitrary and not supported by theory or practice.

A developed country may have a larger exemption limit while a poor country will have a lower exemption limit. Therefore, a uniform level is not conceivable as the basis above which tax can be imposed.

---

<sup>3</sup> Ibid. p, 122.

Therefore, we depend on the relative taxable capacity and try to estimate the taxes paid by salaried group at different levels of income and compare it with the taxes paid by similar income groups in the agricultural sector. People having the same level of income have the same taxable capacity and if there is difference in the tax income ratio of the two one is under taxed.

Colin Clark however, has identified the safe limit for taxation as 25 per cent of the national product<sup>4</sup>. But he is not supported by any theory or practice.

There are different principles explaining the criteria to be followed when taxes are imposed. One important principle is the benefit principle,<sup>5</sup> which states that tax imposed should be proportional to the benefits received by the taxpayer. This accepts the *qui pro quo* in taxes. But, this principle does not have much acceptability now.

The most important principle of taxation is the ability to pay principle, which states that taxes should be levied on the basis of the ability to pay of the assessed. There are different measures of ability<sup>6</sup>: (a) income is the best measure of ability (b) some considered property as a measure of ability (c) for some others consumption is a measure of ability and (d) still some others considered net worth as the best index of ability

Among them income is considered as the best index of the ability to pay, though others have their plus and minus points. Therefore, we try to understand the income of the agriculturists to understand their ability to pay and to see what portion of their ability is given as tax.

---

<sup>4</sup> Colin Clark, *Economic Journal*, ( December 1945) and in his book 'Welfare and Taxation', ( Oxford: Catholic Social Guild, 1954).

<sup>5</sup> Charles M Allen, *The Theory of Taxation*, (Penguin: Modern Economics Texts, 1971) Chapter 8.

<sup>6</sup> Richard A Musgrave, *The Theory of Public Finance*, (New York: McGraw-Hill, Student Edition, 1959), pp.96-97

Tax burden is the sacrifice made by the taxpayer in paying the tax. Tax burden here means the amount of money, the taxpayer has to forego in paying the tax. Tax income ratio shows the actual burden borne by the tax payer in relation to his ability.

### **5.3 Tax Burden of Agriculturists in Relation to their Ability to Pay**

In this chapter, we try to find out the tax burden of the agricultural sector by estimating the direct taxes paid by the cultivators of different size of holdings and of different crops. The only direct tax paid by the agricultural sector at present is the land tax. Another tax that falls on the agricultural sector is the Agricultural Income Tax. But, due to the tax holidays declared and exemptions given to various sections of the farming community no one need to pay it now. Though the tax is not scrapped it stands suspended. Introduction of compounding system for agricultural income tax resulted in the withdrawal of Plantation tax. So the only direct tax that is imposed on agricultural sector is the basic tax called land revenue.

The rate at which land tax is charged is revised in 1998 vide No.5811/Leg.A2/98. The rate of land tax is different for corporations, municipalities and panchayat areas. In corporations, land size up to 2 Ares<sup>7</sup> has to pay Rs.2/- per Are and Rs.4/- per Are for land holdings above 2 Ares. In municipalities, size of holdings up to 6 Ares has to pay Re.1/- per Are and at the rate of Rs.2/- per Are above 6 Ares of holding. And in Gramma panchayat, land size up to 20 Ares pay at the rate of Paise 50 per Are and Re.1/- per Are for land holding above 20 Ares.

The tax burden of agriculturists with different size of land holdings is given in Table 5.1.

---

<sup>7</sup> 1Are is 2.47 cents of land. 100 ares make 1 hectare.

Table 5.1  
Taxes Paid by Agriculturists Having Different Area of Holdings

Area of land (hectares)	Tax in Gramma panchayaths (Rs)	Tax in Municipalities (Rs)	Tax in Corporations (Rs)
0.10 (24.7 cents)	5.00	20.00	40.00
0.50	50.00	100.00	200.00
1.00	100.00	200.00	400.00
2.00	200.00	400.00	800.00
3.00	300.00	600.00	1200.00
5.00	500.00	1000.00	2000.00
20.00	2000.00	4000.00	8000.00

Source: Computed on the basis of the existing tax laws

A person having an area of 10 Ares (24.7 cents) need to pay a land tax of Rs 5/- in Gramma Panchayath and Rs 20/- in Municipalities and Rs 40/- in Corporation areas. Another person having 1 hectare of land (100ares) in Gramma panchayaths should pay a land tax of Rs100/- whereas his counterparts in Municipalities have to pay Rs200/- and in Corporations Rs400/- as land tax. It means that the existing land tax system is not progressive and it appears to be proportional, as tax rate remains the same even when the tax base increases.

Agriculturalists usually do not keep correct documents on their income and expenditure and they never reveal their income properly, because they can hide it without being noticed or caught red-handed. Only the agriculturists know cost incurred on cultivation and the prices, at which they sell their products also are known to them alone. Similarly, the quantity sold also is a matter known only to the farmers as they sell products at different times and at different markets. Some are ignorant some others pretend to be ignorant. All these make it possible for the farmers to hide their income. Therefore, estimation of the tax liability of the farmers is a difficult task, giving way for harassment of farmers by tax officials. That was why there was a demand for compounding of agricultural income, for tax purpose and the government agreed to it.

Here, we are trying to estimate the gross income and net income of the farmers. Income of the farmers depends on the type of crop, area of land cultivated and prices of the commodities and productivity of each crop. Prices of each commodity are available with various agencies like Spices Board for the price of spices, Rubber Board for the prices of rubber, Directorate of Economics and Statistics, Planning Board, etc. Productivity of each crop also is available with the above agencies. We depend on these data supplied by them for an objective assessment of gross income of the cultivator. Net income could be found out by deducting cost of cultivation from the gross income of the cultivator. Many agencies like Rubber Board, Spices Board, NABARD, etc. have estimated cost of cultivation of each crop. Kerala Agricultural University has published 'Package of Practices Recommendations Crops' in which cost component of each crop is given. This can be used to calculate the cost of production of each crop.

We use the cost computed by NABARD<sup>8</sup> for estimating the net income of different farmers who cultivated different crops. We would calculate the net income of the cultivators of some of the important crops, which were under the tax net of Agricultural Income Tax. Then we would compute the tax paid at present by cultivators with different sizes of holdings. Then the tax income ratio is worked out to see the actual tax burden. We take different crops one by one.

### 5.3.1 Rubber

Table below summarises the estimated tax income ratio of a rubber cultivator having different area under cultivation. Gross income is estimated on the basis of secondary data collected from Rubber Board on productivity and price (This is the same as that of the Planning Board and Directorate of Economics and Statistics). Average of prices and productivity of 2000-01, 2001-02, 20002-03 is taken. Net

---

<sup>8</sup> See *Unit Cost for Approved Investments in Agriculture and allied activities 2001-02*, (Trivandrum: NABARD2002), PP.20-27.

income is derived by deducting cost of cultivation in each year from that year's gross income. Cost of cultivation in each year is provided by NABARD. Tax is estimated by applying the existing tax law, i.e., Rs. 100/- per hectare of land holding in grama panchaayat areas Rs. 200/- per hectare in Municipalities and Rs. 400/- per hectare in corporation limits. Since most of the agricultural land is in the grama panchayats, we have calculated the tax income ratio of a cultivator in the grama panchayat.

Table 5.2 shows that the highest tax income ratio for a rubber cultivator is 0.0036 in the 12 year of the cultivation and it continues for the rest of the years. In the eighth year, the tax income ratio is 0.0026. That is the rubber cultivator is paying between 0.36 and 0.26 per cent of his net income as direct taxes on agricultural sector. His net income from one hectare of rubber cultivation varies between Rs. 38911.28/- and Rs.28111.28/-.

Table 5.2  
Tax Income Ratio of Rubber Cultivator Having 1 hectare of Cultivation

Year of cultivation	Cost	Gross Income	Net Income	Tax	Tax-Income Ratio	Tax-Income Ratio if income is larger by 20 per cent	Tax-Income Ratio if income is lower by 20 Per cent
Ist 7 Years	72000			700			
8 <sup>th</sup> Year	15800	54717.28	38911.28	100	0.0026	0.0021	0.0032
9 <sup>th</sup> Year	18600	54717.28	36111.28	100	0.0028	0.0023	0.0035
10 <sup>th</sup> Year	21200	54717.28	33511.28	100	0.0030	0.0025	0.0037
11 <sup>th</sup> Year	23200	54717.28	31511.28	100	0.0032	0.0026	0.0040
12 <sup>th</sup> Year onwards	26600	54717.28	28111.28	100	0.0036	0.0030	0.0044

Source: Computed from Secondary Data

Table also shows the tax-income ratio when there is a 20 per cent downward or upward change in the net income of the cultivator. The highest tax-income ratio

is 0.0044, i.e., about 0.4 per cent of the income is given as direct taxes on agricultural sector.

By multiplying the net income from one hectare with area of land under cultivation we get the total net income of a cultivator. Thus, a cultivator with 3 hectares in the 12<sup>th</sup> year of cultivation has a net income of Rs. 84333.84, with 4 hectares has a net income of Rs. 112445.12 and so on. Tax also increases Rs.100/- per hectare in grama panchayats, i.e., 3 hectares will have a tax of Rs. 300/- and 4 hectares Rs. 400/- and so on. Therefore, tax-income ratio remains the same at 0.0036.

### ***Cost and Subsidies***

As it was clear from table, rubber has an initial cultivation cost of Rs. 72,000 per hectare in the first 7 years of cultivation, when there was no return from the crop. When we assess the cost of cultivation and taxable capacity we should also take into account the subsidies given to the cultivators by the Rubber Board. As per the Rubber Plantation Development Scheme – Phase II and III (1985-92) a subsidy of Rs. 5000 per hectare for growers owning rubber plantation up to 5 hectares was given in traditional areas such as Kerala. Cash subsidy was disbursed in seven instalments after the completion of each stage of the work as stipulated in the scheme. As per the Rubber Plantation Development Schemes Phase IV (1993-2000), Rs.18000/ are given as subsidy for traditional areas from 1997-98 and was reduced to Rs 12000/ per hectare from 2000-01 onwards. Additional input subsidy for the use of poly bagged plants of advance growth was given, at the rate of Rs.3000 per hectare and an input subsidy for the use of fertilisers etc. at a declining rates for five years is payable. The rate per hectare is Rs. 350, Rs.250, Rs.170, Rs.90 and Rs.20.

From the data it is clear that total cost of cultivation till 8<sup>th</sup> year (including 7 years) is Rs. 72000/-. Deduct the subsidy of Rs. 12000/- plus the input subsidy of Rs. 3,000/- per acre for poly bagged plants plus Rs. 880/- as the input subsidy for fertilizers. Then the cost for seven years would be worked out as Rs. 50120/-. Two years net income would be sufficient to cover the initial cost of cultivation.

The analysis shows that if we take a small cultivator with one hectare of land his actual family income is about Rs. 28111.28/- only. In that case, additional taxation will be difficult. But, when the size of holding increases, (say above 3 hectares) net income of the family rises above Rs. 84333.84/- tax income ratio is 0.0036 and there is definitely scope for increased taxation. This is the case when the price of the product increases above certain limit.

83 per cent of the rubber holdings are in the category of 2 hectares or below; 92.17 of the holdings are below 4 hectares. Therefore, 7.83 per cent belong to the category of 4 to 20 hectares. Thus more than 8 per cent (3 to 20 hectare owners) and the estate owners do possess excess capacity to pay tax. Estate owners (307 in number) possess about 11.93 per cent of the total rubber cultivation in India. Total area held by holdings above 4 hectares and estate owners is 20.01 per cent of the total rubber cultivation in India. These cultivators are definitely under taxed.

### **5.3.2 Coconut**

Tax income ratio of coconut cultivator is estimated by taking the average productivity (5975 nuts per hectare) and price (Rs.3.66/) of coconut for the last 3 years 2000-01, 2001-02 and 2002-03 from Economic Review 2003. Data on cost of cultivation is from NABARD. There are two types of cultivation of coconut, rain fed and irrigated crops, which have different cost situations. Coconut has an economic life of 50 years starting from 8<sup>th</sup> year and 7<sup>th</sup> years of cultivation for rain fed and irrigated coconuts respectively. The recurring cost will be Rs. 9000/- and

Rs. 11800/- annually for the two types of cultivation. As Table 5.3 presents the initial cost of cultivation for the first 7 years will be Rs. 78000/- for rain fed coconut and for the first 6 years would be Rs. 73700/- for irrigated ones.

Table 5.3  
Tax Income Ratio of Coconut Cultivator Having 1 hectare of Cultivation

Year	Cost	Gross Income	Net Income	Tax	Tax- Income Ratio	Tax- Income Ratio if income is larger by 20 per cent	Tax- Income Ratio if income is lower by 20 Per cent
<u>Rainfed Area</u>							
1 <sup>st</sup> 7 Years	78000			700			
8 <sup>th</sup> Year Onwards	9000	21868.5	12868.5	100	0.0078	0.0065	0.0097
<u>Irrigated Area</u>							
1 <sup>st</sup> 6 Years	73700			600			
7 <sup>th</sup> Year Onwards	11800	21868.5	10068.5	100	0.0099	0.0083	0.0120

Source: Computed from Secondary Data

By multiplying the net income from one hectare with the number of hectares of land held by the cultivator, we would get his total net income. Therefore, a farmer with 6 hectares of coconut farm in rain fed area has a net income of Rs.77241.00/- and Rs.60411.00/- in irrigated area. Tax income ratio is 0.0078 and 0.0079 for rain fed and irrigated area respectively. So coconut cultivator is paying 0.78 to 0.99 per cent of his net income as direct taxes on agricultural sector at present.

Unless the size of holdings is very large say (more than 6 or 7 hectares) the cultivators' annual family income would be less and it will take many years' net income for him to cover the initial cost of cultivation.

So it is clear from the analysis that small coconut farmers' taxable capacity is limited. It is true that only a very negligible portion of the income is collected as

direct taxes on agricultural sector. But, the scope for taxing them further is limited unless size of holding and prices of coconut increases to a very high level.

### 5.3.3 Tea

There are two types of tea cultivators: one, tea estates and two, individual cultivators. They differ in their mode of cultivation and as Table 5.4 shows, have two sets of costs.

Table 5.4  
Tax Income Ratio of Tea Cultivator Having 1 hectare of Cultivation

Year	Cost	Gross Income	Net Income	Tax	Tax-Income Ratio	Tax-Income Ratio if income is larger by 20 per cent	Tax-Income Ratio if income is lower by 20 Per cent
<u>Individual Cultivators</u>							
1 <sup>st</sup> 4 Years	87800			400			
5 <sup>th</sup> Year	15000	91260	76260	100	0.0013	0.0011	0.0018
6 <sup>th</sup> Year Onwards	20000	91260	71260	100	0.0014	0.0012	0.0018
<u>Estates</u>							
1 <sup>st</sup> 4 Years	116000			400			
5 <sup>th</sup> Year Onwards	36320	91260	54940	100	0.0018	0.0015	0.0023

Source: Computed from Secondary Data

At the three-year average price (Rs.50.25/-) and the average productivity (1816 kg. per hectare) the gross income from tea is Rs. 91260/- per hectare annually. Net income for the cultivator in the fifth year is Rs. 76260/- and from sixth year onwards is Rs. 71260/- and the tax income ratio is 0.0014, i.e., the individual cultivator at the above conditions pays only 0.14 per cent of his income as direct taxes on agricultural sector. If net income has a fluctuation by 20 per cent it may increase to 0.0018 and decrease to 0.0012.

In the case of tea estates, tax income ratio is 0.0018, i.e., 0.18 per cent of the income is taxed away as direct taxes on agriculture. If there is 20 per cent

fluctuation in net income the tax-income ratio can vary between 0.0023 and 0.0015. Thus, the highest tax paid by tea cultivator is 0.18 per cent of the net income and tea estate owner is 0.23 per cent of the net income.

Scarcely one and a half years' income is needed for meeting the initial cost of cultivation incurred in the first four years, when there was no yield from the farm for the individual cultivators. Estate owners need about 2.5 years net income to meet the initial cultivation cost.

It is clear that the tax-income ratio is low and net income is comparatively high. Thus, when the size of holding increases to 2 or more hectares, the ability to pay of the tea cultivator both individual and estate owners are high, and at the existing tax rate, there is untapped potential here.

#### 5.3.4 Coffee

There are different varieties of coffee. Here, we take the Arabica type. Coffee has an economic life span of 25 years. It starts yielding from 5<sup>th</sup> year onwards and the initial cost of cultivation for the first four years (when there is no much yield) is Rs. 39300/-. As is clear from Table 5.5, gross income per hectare of coffee cultivation is Rs. 34466.21/- and net income Rs.24966.21/- in the fifth year of cultivation if average yield is 757 kg. per hectare and the price is Rs. 45.53/- per kg.

Table 5.5  
Tax Income Ratio of Coffee Cultivator Having 1 hectare of Cultivation

Tax Income Ratio	1st 4 Years	5th Year Onwards
Cost	39300	9500.000
Gross Income	Nil	34466.210
Net Income	Nil	24966.210
Tax	400	100.000
Tax-Income Ratio	Nil	0.004
Tax-Income Ratio if income is larger by 20 per cent	Nil	0.003
Tax-Income Ratio if income is lower by 20 Per cent	Nil	0.005

Source: Same as Table 5.2

The tax income ratio is 0.004 and a 20 per cent increase or decrease in net income leads to a tax income ratio of 0.0033 or 0.005.

We found that net income from one hectare of cultivation is Rs. 24966.21. This being the family income cannot be taxed further. Unless size of holding is not more than 3 hectares scope for additional resource mobilization is limited.

### 5.3.5 Cardamom

Spices Board has the details of productivity and cost of cultivation of cardamom for each year of the plant life. Yield per hectare increases as the plant grows and after VII years productivity starts declining. Cost also increases till the third year of cultivation and then saturates at Rs. 60,000/- per hectare per year. The plant starts yielding from the second year onwards. According to NABARD, cardamom has an economic life of ten years.

Table 5.6  
Tax Income Ratio of Cardamom Cultivator Having 1 hectare of Cultivation

Year	Cost (Rs.)	Yield (Kg.)	Gross Income (Rs.)	Net Income (Rs.)	Tax (Rs.)	Tax-Income Ratio	Tax-Income Ratio if income is larger by 20 per cent	Tax-Income Ratio if income is lower by 20 Per cent
1 <sup>st</sup> Year	55600				100			
2 <sup>nd</sup> Year	47700	120	48000	3300	100	0.03000	0.02500	0.03800
3 <sup>rd</sup> Year	62400	360	144000	81600	100	0.01200	0.00100	0.01500
4 <sup>th</sup> Year	60000	510	204000	144000	100	0.00069	0.00058	0.00087
5 <sup>th</sup> Year	60000	510	204000	144000	100	0.00069	0.00058	0.00087
6 <sup>th</sup> Year	60000	510	204000	144000	100	0.00069	0.00058	0.00087
7 <sup>th</sup> Year	60000	510	204000	144000	100	0.00069	0.00058	0.00087
8 <sup>th</sup> Year	60000	450	180000	120000	100	0.00083	0.00069	0.00100
9 <sup>th</sup> Year	60000	360	144000	84000	100	0.00119	0.00099	0.00150
10 <sup>th</sup> Year	60000	300	120000	60000	100	0.00160	0.00140	0.00200

Source: Computed from Secondary Data

The income is worked out at the price Rs. 400/- per kg. of cardamom. Table 5.6 shows that in the second year of cultivation, cardamom starts yielding and the tax-income ratio was 0.03 and tax income ratio falls as the plant matures and tax income ratio falls to 0.00069, i.e., the cardamom cultivator pays only 0.06 per cent of the income as direct taxes when the plant is in its maximum yield and it continues for a few years. Then, the tax income ratio increases marginally to 0.00083 and then to 0.0016. If the net returns fluctuate 20 per cent upwards tax income ratio, falls to 0.00058. If the net returns fall by 20 per cent tax income ratio increases to a maximum of 0.002 except in the first year of yield.

We find that the net income of the cultivator is reasonably high (above Rs. 60000/-, even in the 10<sup>th</sup> year of cultivation, i.e, towards the end of the accepted economic life of the plant). If the size of holding increases the net income increases and we can conclude that there is untapped tax potential in the cardamom sector.

### **5.3.6 Cashew**

Another important crop that was taxed under the Agricultural Income Tax is cashew. There are two types of cashew cultivation. Cultivation cost will be Rs.37450/- for one type and Rs.39100/- for the other in the first six years (Table 5.7). The maintenance cost is Rs.5930/- in both types from 6<sup>th</sup> year onwards. Average price of raw cashew is Rs.25.24/- and average productivity is 728 kg per hectare. So the gross income is Rs.18374.72/- and net income is Rs.12434.72/-. Tax income ratio is 0.008.

A cultivator must have a large area of cashew cultivation if he is to come under the personal income tax laws. Annual income of the cultivator having one hectare is just Rs.12434.72/-. He needs at least 3 to 4 years income to cover the initial cultivation cost for the first six years.

A 20 per cent fluctuation in net income increases the tax income ratio to 0.01 and decreases to 0.0067. Cashew has an economic life of 25 years.

Table 5.7  
Tax Income Ratio of Cashew Cultivator Having 1 hectare of Cultivation

Year	Cost	Gross Income	Net Income	Tax	Tax- Income Ratio	Tax- Income Ratio if income is larger by 20 per cent	Tax- Income Ratio if income is lower by 20 Per cent
<u>Type I cultivation</u>							
1 <sup>st</sup> 6 Years	39100			600			
7 <sup>th</sup> Year Onwards	5930	18374.72	12444.72	100	0.008	0.0067	0.01
<u>Type II cultivation</u>							
1 <sup>st</sup> 6 Years	37450			600			
7 <sup>th</sup> Year Onwards	5930	18374.72	12444.72	100	0.008	0.0067	0.01

Source: Computed from Secondary Data

### 5.3.7 Pepper

Total cost of cultivation of pepper for the first four years add up to Rs.63600/- (Table 5.8). Average price is Rs.73.78/- and average productivity is 295 kg per hectare. Thus, the gross income is Rs.21765.10/- from one hectare and the net income is just Rs.5705/-. Tax income ratio is 0.018. We should notice the fact that a cultivator who has one hectare of pepper plantation has just Rs.5705 as his net income. If his income is to reach the limit of personal income tax he must have very large size of land under pepper cultivation. He needs at least 12 years to cover the initial cultivation cost at the rate of Rs.5705/- of net income. Fluctuation in net income by 20 per cent raises the tax income ratio to 0.22 and decreases to 0.015.

Table 5.8  
Tax Income Ratio of Pepper Cultivator Having 1 hectare of Cultivation

Tax-Income Ratio	1st 4 Years	5th Year Onwards
Cost	63600	16060.000
Gross Income	Nil	21765.000
Net Income	Nil	5705.000
Tax	400	100.000
Tax-Income Ratio	Nil	0.018
Tax-Income Ratio if income is larger by 20 per cent	Nil	0.015
Tax-Income Ratio if income is lower by 20 per cent	Nil	0.022

Source: Computed from Secondary Data

#### 5.4 Intra-Sectoral Equity in Taxation

Equity is a basic principle of taxation. Adam Smith himself had listed this as the first canon of taxation in 1776 and ability to pay becomes the base of a fair tax system. Most people take it for granted that a fair tax system calls on the richer members of the community to pay more taxes than the poor<sup>9</sup>.

Horizontal equity means that equals (in ability to pay) should be treated equally or similarly situated should be treated similarly. Vertical equity means the proper division of tax burden among people of differing ability to pay according to their ability.

Here, we try to measure the equity among different cultivators of different crops. Equity is measured on the basis of the difference in the tax income ratio as we considered net income is the best measure of ability to pay. Tax income ratio of different crops differ as income from each piece of land depend on the type of crop cultivated and the tax is on the basis of the area of land possessed.

Here, we rank different cultivators on the basis of their tax income ratio in the descending order and find out the rate at which succeeding cultivator is paying tax in comparison of the former one. Since there are different tax income ratios

<sup>9</sup> Otto Eckstein, *Public Finance*, (New Delhi: Prentice Hall of India Pvt.Ltd,1987), p.53.

for different years for the same crop tax income ratio of the year in which crop has matured is taken for comparison.

The table shows that pepper cultivator pays the largest tax and cardamom cultivator pays the least. Pepper cultivator pays 225 per cent more than the cashew cultivator, 231 per cent of the coconut cultivator, 692 per cent of rubber and 2608.7 per cent of what the cardamom cultivator pays. Cardamom cultivator pays just 0.38 per cent of pepper cultivator, 8.6 per cent of cashew cultivator, 8.85 per cent of coconut cultivator and so on. Even rubber and tea cultivators who have comparatively larger tax potential is paying 376.81 per cent and 260.87 (202.89-individual cultivator) per cent more than the cardamom cultivator respectively. There is huge inequality among cultivators of different crops with regard to direct taxes on agricultural sector.

The analysis shows that though the tax system is a proportional one in terms of the size of holding (tax rate and size of holding increases at the same rate Rs. 100/- per hectare in Grama Panchayat, Rs. 200/- per hectare in Municipalities and Rs. 400/- per hectare in Corporations) tax-income ratio declines as net income increases. Therefore, the existing direct tax system on agricultural sector is a regressive one, besides being that it is not progressive.

Table 5.9  
Inter Crop Comparison of Tax Burden

Crops	Tax- Income Ratio	% of Pepper	% of Cashew	% Of Coconut		% of Coffee	% of Rubber	% of Tea		% of Cardamom	
				Rainfed	Irrigated			Individual	Estate		
Pepper	0.01800	-	225.00	231.00	181.80	450.00	692.00	1286.00	1000.00	2608.70	
Cashew	0.00800	44.44	-	103.00	80.80	200.00	308.00	571.42	444.44	1159.40	
Coconut	Rainfed	0.00780	43.33	97.50	-	78.78	195.00	300.00	557.14	433.33	1130.43
	Irrigated	0.00990	55.00	123.00	127.00	-	247.50	380.76	707.14	550.00	1434.8-
Coffee	0.00400	22.22	50.00	51.28	40.40	-	153.80	285.71	222.22	579.70	
Rubber	0.00260	14.44	32.50	53.33	26.26	65.00	-	185.70	144.44	376.81	
Tea	Individual	0.00140	0.78	17.50	23.08	14.14	35.00	53.85	-	77.77	260.87
	Estate	0.00180	1.00	22.50	17.94	18.18	45.00	69.23	128.57	-	202.89
Cardamom	0.00069	0.38	8.60	8.85	6.97	22.50	26.50	49.28	38.33	-	

Source: Computed from Secondary Data

## 5.5 Capacity Index

We have measured the taxable capacity of different cultivators in the preceding section and estimated the tax-income ratio. In this section, we try to ascertain the taxable capacity of different agricultural families by conducting a family survey and constructing a capacity index for them. Capacity indices were constructed also for non-agricultural families where either one or two members (most often either or both of the spouses) are employed in organised sector, so that comparison can be made.

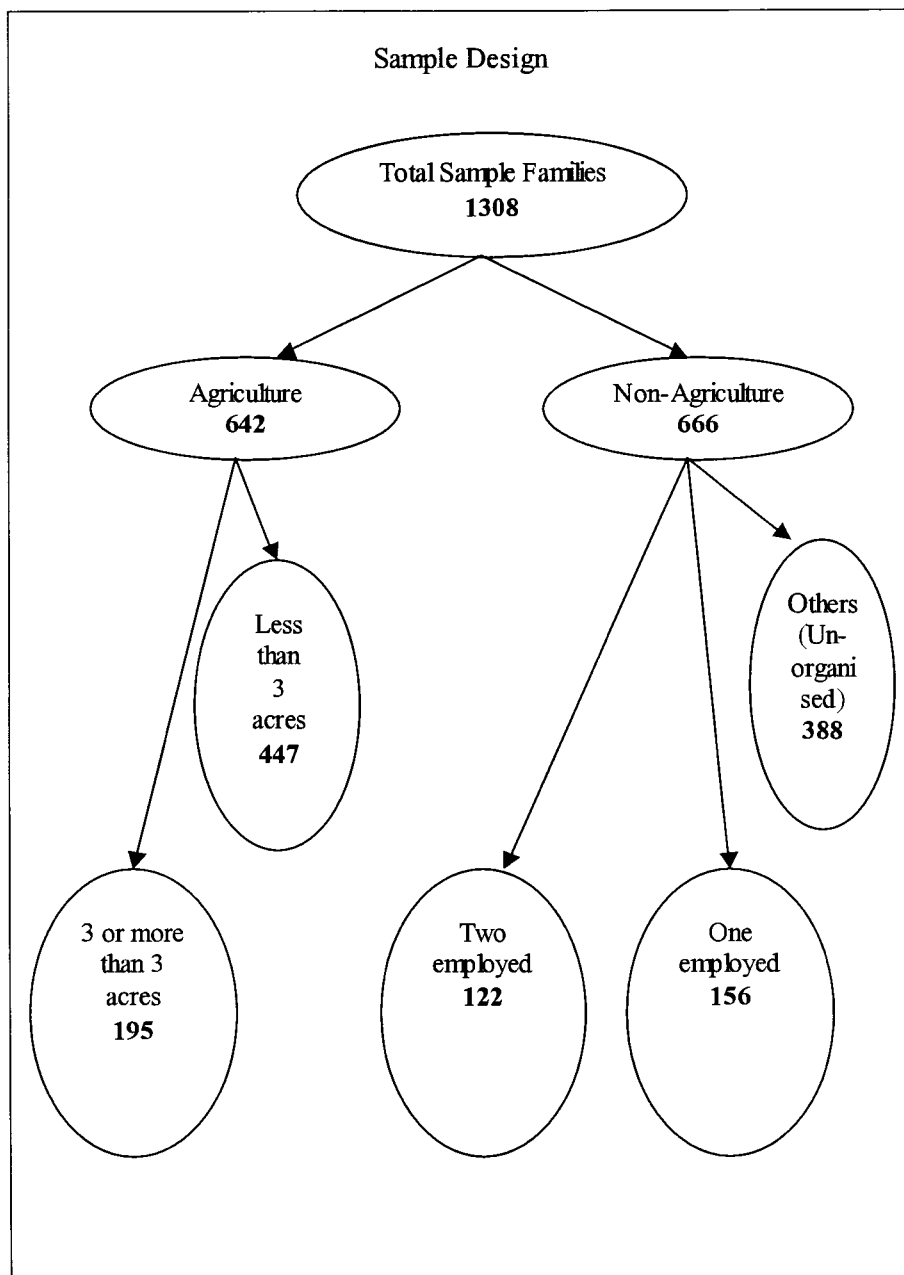
Of the 1308 returned filled in (Fig.5.1) questionnaires, 642 belonged to agricultural families. Of the 642 agricultural families, there were many types of farmers, grouped on the basis of the size of holdings of each family (Table5.10). The families are classified into agricultural and non-agricultural. Agricultural families are those whose only source of income is agriculture and do not have any other supplementary source of income<sup>10</sup>.

Non-agricultural is further classified into unorganised, both employed and single employed on the basis of the nature and type of employment. Unorganised are those families whose income are not properly accounted; nature of employment is not permanent and the income can be easily hidden. Therefore, they do not pay taxes properly. These include traders, businessmen, employed in private sector, but not paid through bills or banks, head load workers, agricultural labourers, etc.

---

<sup>10</sup> Details of the sample and rationale of the sampling are given in the first chapter.

Fig.5.1



Two (Both) employed are those families where both the spouses are employed either in government service, banks, semi governmental and public sector enterprises or private sector enterprises, which pay the salary through bills or through banks. One (Single) employed are those families where one of the spouses are employed in such organisations. They have a permanent income and they cannot easily hide their income so that they are paying the taxes properly.

The families are classified so with the specific objective of comparing the agricultural families with those families where either or both of the spouses are employed, earning permanent income and are supposed to pay taxes properly. As we said at the outset of the chapter, the main objective of this chapter is to try and measure the taxable capacity of the agricultural sector and try to see whether there is excess taxable capacity.

Marginal farmers<sup>11</sup> with less than one hectare of land are so poor that they do not possess excess taxable capacity. Therefore, we attempt at measuring the taxable capacity of those agriculturists with the more than three acres of land for cultivation. Table 5.10 gives a picture of the size of holding of the families surveyed. Of the 642 agricultural families studied only 195 have land holding above 3 acres; 194 have size of holding less than 50 cents; 253 between 50 cents and 3 acres. This means that about 30 per cent of agricultural families have a size of holding 3 or more than 3 acres.

Table 5.10  
Ownership Pattern of Land

Size of Holding (cents)	Agricultural	Non-Agricultural		
		Unorganised	Both	Single
<50	194	244	13	18
50 – 299	253	101	84	114
300 – 499	97	22	13	13
500 – 999	81	18	10	9
1000+	17	3	2	2
<b>Total</b>	<b>642</b>	<b>388</b>	<b>122</b>	<b>156</b>

Note: Both means both spouses employed and single means single spouse employed.

Source: Family Survey

Table 5.10 also shows that 92 non-agricultural families have size of holding more than 3 acres. Seven non-agricultural families and 17 agricultural families have more than 10 acres of land each. It should be noted that 49 non-agricultural families, whose spouses (either one or both) are employed have land holdings of

<sup>11</sup> Statistics for Planning (2001), Directorate of Economics and Statistics.

more than 3 acres, the rest, are 43 unorganised families. This means that the capacity indices of employed families depend not only on the salary or wages, which the spouses earn but also the agricultural income they earn, whereas the agricultural family's capacity index depends only on agricultural income. This means that if the capacity index of one agricultural family and one non-agricultural family are equal, the corresponding income of the agricultural family is not just equal to the revealed salary income of the employed spouses. But, we would take only the revealed salary income for the sake of comparison because income from agriculture and other activities of non-agricultural households are not accounted.

Thus, we assign the revealed income of the employed families to the agricultural families having similar capacity index. Therefore, there is a chance for showing a lower income for the agriculturists while the actual income is much greater than that. Therefore, the capacity attributed is an underestimated figure. In any way, it will not be an over estimation of their ability.

### **5.5.1 Composite Capacity Index**

Capacity index is a composite index, which takes into account various components of a sound standard of living. Capacity index constructed for agricultural families is compared with the capacity indices constructed for those families having employed couples as the head. (Taxes paid by these employed couple are taken to show the taxes that can be paid by those having the similar capacity index). This would permit one:

- (i) to find out the taxes paid by the employed couples and non-employed couples having the same capacity index and difference in the actual payment of tax

- (ii) to fix the level of income of the agricultural families. Income being the most important determinant of the standard of living one is justified to conclude that families having similar capacity indices have similar income levels, other things remaining the same.

The construction of the index is simple. Here we are trying to work out a composite index. Composite index was constructed for 195 agricultural families who own 3 or more than 3 acres of land, 122 families whose both spouses are employed and 156 families whom one of the spouses is employed. Thus the capacity indexes of 473 families were constructed. The information about the families was collected by a primary survey using a questionnaire (Appendix -1).

Information was collected on various aspects of family expenditure, and variables, which will shed light on the standard of living or the capacity of the families. Different weights were given to each variable depending on the insight it can provide us about the capacity of the families. In order to assign weight, 100 points were distributed among the variables depending on the relative importance of each variable. Variables that are considered are consumer articles owned, vehicles, gold ornaments owned, size and area of the house, telephone bill, current bill, type of education of the children, amount and purpose of loans availed, if children are staying in the hostels for their study or not etc.

Different consumer articles such as TV, refrigerator, stereo, phone, mobile phone, computer, Malayalam news paper, English newspaper, rubber roller, water heater, cooking gas, soda maker, mixy, juice maker, grinder, vacuum cleaner, water purifier, washing machine, pressure cooker, foam bed, etc. are given different points on the basis of each one's capacity to shed light on the actual economic capacity of the family.

For example, the possession of mobile phone by an agriculturist in rural area would mean that he can afford it and his ability to maintain a very high standard of living is visible. Therefore, mobile phone was assigned the highest score. Similarly, possession of a Malayalam newspaper is common in Kerala and is part and parcel of the daily life of any Malayali and it does not reflect a very high ability on the part of the owner and it is assigned a very low value. Possession of gold up to a certain weight is common in every family and it requires not much economic capacity for its possession; and possession of gold above that limit do show the increasing capacity of family and increasing quantity of gold possession attracts a progressive score; this is the case with larger houses, increasing phone bills, current bills etc.

Availing of loans is at the same time showing the indebtedness and ability to avail and use loans. Therefore, loans at one point show the pauperisation of the family and at the same time ability to use loan facilities for the economic progress of the family. This is clear from the fact that a small loan availed for purchasing a necessary consumer good, or a small piece of land or a small house shows that the family is actually poor where as a huge loan for purchasing a vehicle or a large housing loan, do not necessarily explain the indebtedness but the better ability of the family to use the facilities for economic progress. So different values had to be assigned to the loan availed on the basis of the amount and purpose of the loan. So also the type of education the children are provided with and the type of institution in which children are studying shed light into the economic capacity of the family.

On the basis of all the above, values were assigned to each component possessed by each family. Scores were totalled to get each family's capacity composite/capacity index. Families with different scores were arranged in the descending order: family with the highest score getting the first rank and so on.

Table 5.11 summarises the rank, the points received by each family, type of the family and the revealed income of the top 20 families. Of the ten families, having the highest capacity indices, one is an agricultural family (rank 9, points 307) two are from single employed families and 7 from both employed families. This means that at least one agricultural family is among the first ten better off families of the sample.

Table 5.11  
Distribution of Top Twenty Families with Highest Capacity Index

Rank	Point	Type of Family	Revealed Income (Rs)
1	366	Both Employed	12,00,000
2	344	Both Employed	10,00,000
3	332	Both Employed	N.R.
4	329	Both Employed	N.R.
5	329	Single Employed	200,000
6	327	Both Employed	2,50,000
7	323	Both Employed	250,000
8	319	Both Employed	2,50,000
<b>9</b>	<b>307</b>	<b>Agricultural</b>	-
10	304	Single Employed	N.R.
11	298	Both Employed	200,000
<b>12</b>	<b>296</b>	<b>Agricultural</b>	-
13	294	Single Employed	N.R.
14	286	Both Employed	2,50,000
15	286	Single Employed	1,70,000
16	283	Both Employed	1,44,000
17	282	Both Employed	2,50,000
18	282	Both Employed	200,000
19	280	Both Employed	1,62,000
20	277	Single Employed	200,000

Note: N.R- Note Revealed

Source: Family Survey

Family that possess 8<sup>th</sup> position has 319 points. Both the spouses are employed there. Their revealed family income is Rs. 2,50,000/-. The family that has 10<sup>th</sup> rank has 302 points and have one employed person. But this family having 5 acres of land also, has not revealed their income.

Family having the 11th rank has 298 points and both spouses are employed. It has revealed to have Rs. 2,00,000/- as annual family income from salary. This family possess 3.5 acres of land cultivating chiefly rubber. Therefore, this family's income must be higher than the Rs. 2,00,000/- salary income. With regard to the agricultural family having the 9<sup>th</sup> rank, we have reason to conclude that it must possess income greater than Rs. 2,00,000/- per annum or is having a standard of living equivalent to a family having more than Rs.200,000/- income per year.

Direct taxes paid by the family having the 10<sup>th</sup> and 11<sup>th</sup> rank are Rs. 9000/- and Rs.6000/- respectively. Direct taxes paid by the agricultural family is not revealed. It is probable that the tax paid by the agricultural family is not remembered, as it usually does not maintain proper records and the tax is not paid at regular intervals; we know that the direct tax of this agricultural family having 10 acres of land cultivating mostly rubber is composed of only land tax. Since rubber up to 20 hectares are exempt from Agricultural Income Tax since 2001 land tax is the only tax to be paid. This family as most of the agricultural families comes from rural area. Therefore, the rate of tax per hectare is Rs. 100/- and the total land tax paid for 10 acres of land is Rs.400/-. If we attribute Rs. 200000/- as the annual income of that family then the tax gross income ratio is 0.002, where as the tax income ratio of the 11<sup>th</sup> rank holder (non-agricultural family) is 0.03. Thus the agricultural family is paying only 6.6 per cent of the tax of the non-agricultural family of similar capacity index.

Now, we will have a still closer look at the facilities and amenities available in this particular agricultural family. This family has almost all the modern gadgets of life familiar in this part of the country, such as colour TV, refrigerator, stereo, telephone, mixy, grinder, washing machine, pressure cooker and cooking gas. The household possess rubber roller. It also has juice maker and water heater,

which are not common among even rich agricultural families. The family subscribes an English newspaper and possess personal computer, water purifier and a mobile phone. These are consumer durables possessed only by very rich families. The respondent of the family was not ready to reveal the size of the house and quantity of gold possessed. It is also noteworthy that the family pays a bimonthly telephone bill of Rs. 2,000/- and current bill of Rs. 1,000/-. The family is capable of getting an admission and financing its child for a biotechnology course without availing an educational loan and the ward is staying in a hostel for its study.

Now let us try to estimate actual income of this family having 10 acres of rubber. From the preceding discussion on the tax burden of the rubber cultivator it is clear that a cultivator having 10 acres (4 hectares) of rubber cultivation will have a gross income of Rs. 218845.12/- and a net income of Rs.112445.12/-. As mentioned earlier the family is paying Rs. 400/- as direct agricultural taxes. The tax net income ratio is 0.0036, i.e., the family is paying just 0.36 per cent of the net income as tax i.e., 12 per cent of the tax income ratio of the non agricultural families.

Now, let us take the next ten families (Table 5.11) having the highest capacity index. We find that one family (rank 12) is an agricultural family, 3 single employed and 6 both employed families. This family having the 12<sup>th</sup> rank has 296 points.

As we said earlier the family that possess 11<sup>th</sup> rank has 298 points. Both of the spouses are employed. It has revealed to have Rs. 2,00,000/- as salary income and the family has 3.5 acres of land. Therefore, it must have some income from agriculture also. That means that its total income must be more than the salary income of Rs. 2,00,000.

The family that possess 13<sup>th</sup> rank has 294 points; but has not revealed its income. It has 4 acres of landed property. Since income is not revealed, we cannot have any comparison.

The 14<sup>th</sup> rank holder has 286 points and is revealed to have Rs. 2,50,000/- as the family income. It has only 10 cents of land. Both the spouses are doctors, who reveals to pay Rs. 45,820/- as total tax ; Rs. 4800/- as profession tax, and Rs. 40,000/- as income tax and Rs. 1000/- as house tax and Rs. 20 as land tax. We can conclude that the 12<sup>th</sup> rank holding agricultural family has a capacity index higher than the 14<sup>th</sup> rank holding family that pays Rs.45820/- as tax.

Now, let us evaluate the standard of living of this agricultural family, which possesses 8 acres of land cultivating mostly rubber. Children are studying in an English medium school. It has almost all the modern facilities of life such as washing machine, English newspaper, juice maker, vacuum cleaner, grinder and water purifier. It has a 2,000 square feet large house and a motorbike. Bimonthly phone bill is about Rs. 850/- and current bill is around Rs. 900/-. These are amenities enjoyed by a family, which is rich by Kerala standards.

Now let us try to estimate the actual income of this family of 5 members having 8 acres (3.23 hectares). The family reveals to have rubber plantation in the entire land. The gross income from 3.23 hectares of rubber cultivation would be Rs. 1,76,717.43/- and net income Rs. 90799.43/-. The family would be paying Rs. 323/- as land tax and the tax net income ratio is 0.0033, i.e., paying about 0.33 per cent of the agricultural income as direct agricultural taxes.

In the next 10 families, 3 are agricultural families having 27<sup>th</sup>, 28<sup>th</sup> and 30<sup>th</sup> ranks, two are single employed and 5 both employed families. Therefore, among the first 30 families having the highest capacity index, five are agricultural

families. It is interesting to note that the family having 31<sup>st</sup> rank has 250 points and reveals to have an income equal to Rs. 1,50,000/-.

Of the total 473 families, whose capacity indices are worked out we take first 10 per cent and find that 9 of this 10 per cent are agricultural families. This comes about 1.4 per cent of total agricultural families (9/642) or 4.6 per cent of the sample families (9/195).

If we study the top 20 per cent, 19 are agricultural families. Nineteen agricultural families make about 10 per cent of the agricultural families (19/195) studied. This is to say that 2.96 per cent of the agricultural families (19/642) belong to the top 20 per cent of the total families.

Therefore, we can conclude that there are pockets of plenty and affluence even among the agricultural families.

### **5.5.2 Facilities of the top 19 agricultural families**

We shall have a closer look at the above 19 families. Table 5.12 gives a picture of the consumer articles possessed by these families. Ten families have either a bike or a four-wheeler. Six families have mobile phones and five have personnel computers. Five families subscribe English newspapers. Three families have water purifiers and nine possess vacuum cleaners.

Table 5.12  
Consumer Articles Possessed by Top 19 Agricultural  
Families

Consumer Articles	Number of Families
TV	19
Refrigerator	19
Stereo	18
Phone	19
Malayalam paper	19
English Paper	05
Rubber Roll	13
Water Heater	12
Cooking Gas	19
Soda Maker	09
Mixy	19
Juice maker	11
Grinder	16
Vacuum Cleaner	09
Water Purifier	03
Pressure Cooker	19
Foam Bed	18
Students in Hostel	02
Possessing Vehicles	10
Mobile Phone	06
Computer	05
Washing Machine	16

Source: Family Survey

Table 5.13 giving the asset position substantiate our conclusion that some agricultural families are rich. The table shows that average holding of gold is 182 grams, average size of house is 1700 sq. feet and average size of land holding is 6.84 acres. These families can afford an average expenditure of Rs. 857/- bimonthly on phone bill and Rs. 1008/- on current bill.

Table 5.13  
Asset Position and Expenditure Pattern of Top 19 Agricultural Families

Assets	Average
Average Gold Possessed	182 Grams
Average Size of House	1700 Sq.Ft.
Average Size of Holding	6.84 Acres
Average Bimonthly Phone Bill	Rs.857
Average Bimonthly Current Bill	Rs.1008

Source: Family Survey

Table 5.14 summarizes the type of education provided to the children in these families. Sixteen out of 19 houses are providing the best type of education to their children. It is true that education of the children is so dear to every one that every parent in Kerala is ready to spend any amount even by borrowing. But, the table shows that only 3 families avail educational loan. Average size of loan of these families is Rs.133000/-. This again is a pointer to the ability of the families to avail loan by providing collateral securities.

Table 5.14  
Type of Education and Education Loan in the Top 19 Agricultural Families

Course	Number of families
M Com.	1
B Tech.	2
MBA	1
M Ped.	1
B Sc. (Bo)	1
B Sc. (N)	1
Nurse	2
B Sc.	1
ICSE	3
CBSE	2
E.M	1
Number of Families who availed loan	3

Source; Family Survey

### 5.5.3 Comparison of Families on Selected Consumer Articles.

Now we compare the overall picture of the agricultural families and the single employed or both employed families in respect of the possession of selected

consumer durables. Table 5.15 shows that agricultural families constitute about 41.23 per cent of the sample studied. These families possess about 16.67 per cent of mobile phones and personal computers, 23.29 per cent of vacuum cleaners, 24.24 per cent of water purifiers, etc. The families, where only one is employed are similar to the agricultural families. The table proves that agricultural families are not way behind other families in the society in respect of the possession of consumer articles are concerned.

Table 5.15  
Possession of Selected Consumer Durables by Different Families

Consumer Goods	AF	BF	SF	Total
Mobile Phone	9 (16.67)	27 (50.00)	18 (33.33)	54
Computer	8 (16.67)	24 (50.00)	16 (33.33)	48
English Paper	8 (15.69)	27 (52.94)	16 (31.37)	51
Water Heater	27 (35.07)	29 (37.66)	21 (27.27)	77
Soda Maker	32 (28.57)	45 (40.18)	35 (31.25)	112
Juice Maker	25 (31.25)	28 (35.00)	27 (33.75)	80
Grinder	39 (32.33)	40 (33.06)	42 (34.71)	121
Vacuum Cleaner	17 (23.29)	44 (60.27)	12 (16.44)	73
Water Purifier	8 (24.24)	11 (33.33)	14 (42.42)	33
Washing Machine	45 (26.63)	79 (46.75)	45 (26.63)	169
Hostel	14 (38.89)	17 (47.22)	5 (13.89)	36
Total Families	195 (41.23)	122 (25.79)	156 (32.98)	473

\*Note: AF: Agricultural families, BF: Both spouses employed families; SF: single employed families

Source: Family survey

Thus we may conclude that there are really rich people among the agriculturists whose tax potential is not fully tapped.

## 5.6 Inter-sectoral Equity in Taxation

Inter-sectoral comparison of the tax burden is done in two ways: (i) on the basis of the findings of the family survey and (ii) on the basis of the computation of the tax-income ratio of the agricultural and salaried group of tax payers.

In the first method, we depend on the data collected through the family survey. Here, we have the revealed income of the salaried families and the revealed taxes of such families. Thus, we can compute the tax-income ratio on the basis of the revealed income and revealed tax. Then we assume that agricultural families having similar capacity index have similar income levels. Then we compute the tax paid by these families on the basis of the ownership of land holding, again revealed from family survey. Then we estimate the tax income ratio and compare it with that of the salary income earners.

As it was explained earlier (Table 5.11), family having the 9<sup>th</sup> rank was an agricultural family, which had 10 acres of rubber cultivation. Family having 11<sup>th</sup> rank had a revealed income of Rs. 200000/-. It was paying Rs. 6000/- as direct taxes. The tax-income ratio then is 0.03, i.e., they are paying 3 per cent of income as direct tax. We assume that the agricultural family having 9<sup>th</sup> rank also have Rs. 200000/- as family income. Tax for 10 acres of the land would be Rs. 400/- (Rs. 100/- per hectare). Then the tax income ratio is 0.002, i.e., the agricultural family is paying 0.2 per cent of the income as direct taxes. This agricultural family is paying just 6.6 per cent of what the salaried income family having similar income is paying as tax.

Similarly, family having 12<sup>th</sup> rank is an agricultural family having 8 acres of rubber plantation and is paying Rs. 300/- as direct taxes. The family having less points in capacity index revealed to have Rs. 250,000 as family income and is revealed to paying Rs.45820/- as direct taxes.

Families having 27<sup>th</sup>, 28<sup>th</sup> and 30<sup>th</sup> ranks are agricultural families having 6, 5 and 5 acres of land respectively. The family having the 31<sup>st</sup> rank has Rs. 150000/- family income. This family where both husband and wife are employed is paying Rs. 5000/- as direct taxes. The agricultural families mentioned above must be paying Rs. 250/- and Rs.200/- respectively as direct taxes, i.e., just 5 and 4 per cent respectively of the non-agricultural family.

In the second method, we estimate the tax-income ratio of the cultivators of different crops using secondary data as done in section 5.3. Then, we estimate the tax-income ratio of the salaried income earner at different levels of income. Then we compute the percentage of the tax income ratio of different cultivators to the tax income ratio of the salaried man at different levels of income.

In the comparison the gross income of the salaried man and net income of the cultivator is taken. This looks illogical and some economists like Raj<sup>12</sup> wants the gross income of the cultivator be taken to assess the taxable capacity, as according to him, major share of the paid out cost of cultivation becomes the family income since family does most of the work in the farm.

This is true in small family holdings and in cultivation meant for subsistence. In Kerala, where commercialisation of crop has taken place family job in cultivation will not be able to do all the works; and seeds, fertilizers, chemical pesticides etc. constitute major component of the cost. Even preparation of the land for cultivation such as digging of land for planting rubber seedlings require hired labour. Therefore, we cannot hold that paid out cost turn out to be the family income of the cultivator; only a part of it becomes part of the family income. Therefore, net income should be considered as the actual income of the cultivator. Since the salaried man has the standard deductions from gross income for Personal

---

<sup>12</sup> Report of the Committee on Taxation of Agricultural Wealth and Income, p.29.

income tax we cannot consider his net income for tax, i.e. we should consider the gross income.

If gross income is considered as the actual income of the cultivator then tax income ratio would be still lower and the inequality between agricultural sector and non-agricultural sector especially salaried class would be larger.

Direct taxes paid by an employee are profession tax and personal income tax. Profession tax and personal income tax vary with variation in income. Profession tax is on the basis of the half yearly income of the employee. Personal income tax paid by an employee depends on the annual income and deductions enjoyed as a result of different savings made. Savings of different people differ and therefore tax actually paid by different people having the same salary income differ. In order to avoid this problem, we can either compute the tax liability of a person without considering the deductions that can be enjoyed or assume that all are enjoying maximum deduction (Rs. 10500/-) to tax. In the former case the tax amount will be larger and in the latter case, will be lower. In the former case, tax-income ratio will be larger than in the latter. We follow the latter method of allowing maximum deductions to all. This is because there are certain compulsory savings like, provident fund, group insurance, which every one has to make and there will be deduction to tax as a result of them. Since housing loan interest and principal are allowed deductions on income tax and large amounts of Dearness Arrear is credited to Provident Fund let us assume that all the employees save the maximum and get maximum deductions. For lower income groups, say for people with Rs. 100001/- this will lead to no tax situation. (According to the budget proposal 2004-05 people with less than Rs. 100000/- as annual income need not pay personal income tax). We assume that they are paying only profession tax.

Table 5.16 gives the tax-income ratios of cultivators of different crops and salaried income earners of different income levels.

The tax-income ratio of different cultivators do not change as their income increases, because for increased/larger income they need larger size of holdings which leads to larger taxes. Since income and tax increases at the same rate tax-income ratio remain constant; a doubling of income calls for a doubling of ownership of land and consequently a doubling of land tax and so on.

Table 5.16  
Tax Income Ratio of Cultivators of Different Crops and Salaried Man

Income (Rs.)	Pepper	Cas	Coconut		Coffee	Rub	Tea		Carda mamom	Salaried Man
			Rain	Irri.			Estate	Ind.		
25001	0.018	0.008	0.0078	0.0099	0.004	0.0026	0.0018	0.0014	0.00069	0.0019
50001	0.018	0.008	0.0078	0.0099	0.004	0.0026	0.0018	0.0014	0.00069	0.0040
100001	0.018	0.008	0.0078	0.0099	0.004	0.0026	0.0018	0.0014	0.00069	0.0050
150001	0.018	0.008	0.0078	0.0099	0.004	0.0026	0.0018	0.0014	0.00069	0.0670
200001	0.018	0.008	0.0078	0.0099	0.004	0.0026	0.0018	0.0014	0.00069	0.1230
300001	0.018	0.008	0.0078	0.0099	0.004	0.0026	0.0018	0.0014	0.00069	0.1850
400001	0.018	0.008	0.0070	0.0099	0.004	0.0026	0.0018	0.0014	0.00069	0.2200
1000001	0.018	0.008	0.0078	0.0099	0.004	0.0026	0.0018	0.0014	0.00069	0.2600

Note: Rain-rainfed; Irri.-irrigated; Ind.- individual cultivators.

Source: computed on the basis of the methodology discussed in 5.6

Tax-income ratio of salaried man increases as income increases.

At the bottom level of Rs. 25000/- tax income ratio of the cultivators except that of cardamom and tea is larger than that of the salaried man. For crops like pepper, cashew and coconut tax-income ratio is higher than the employees up to the income level of Rs. 100000/-. This means that cultivators of pepper having up to 17.52 hectares of land, up to 8.36 hectares of cashew, up to 7.77 hectares of rain fed coconut and 9.92 hectares of irrigated coconut are bearing more tax burden than the salaried income groups.

Among the income groups of Rs. 150000/- and above cultivators are paying much less than the salaried class.

Rubber, tea and cardamom cultivators of income above Rs. 25000/- are also paying less than the employees.

Table 5.17  
Tax-Income Ratio of Different Cultivators of Different Crops as Percentage of the Tax Income Ratio of the Salaried People at Different Levels of Income

Income	Pepper	Cashew	Coconut		Rubber	Tea		Carda mamom	Tax/ Income of salaried.
			Rain	Irri..		Estate	Indi.		
25001	947.37	421.05	410.53	521.05	136.84	94.74	73.68	36.32	0.0019
50001	450.00	200.00	195	247.5	65	45	35	17.25	0.004
100001	360.00	160.00	156	198	52	36	28	13.80	0.005
150001	26.87	11.94	11.64	14.78	3.88	2.68	2.09	1.03	0.067
200001	14.63	6.50	6.34	8.05	2.11	1.46	1.14	0.56	0.123
300001	9.73	4.32	4.22	5.35	1.41	0.97	0.76	0.37	0.185
400001	8.15	3.62	3.53	4.48	1.18	0.82	0.63	0.31	0.221
1000001	6.92	3.08	3.00	3.81	1.00	0.69	0.54	0.27	0.26

Note: Rain-rainfed; Irri.- irrigated; Indi. Individual cultivators

Source: Same as 5.16

The table shows the tax income ratio of different crops as percentage of the actual tax income ratio of the salaried people. At Rs 25001/ level of income, tax-income ratio of the pepper cultivator is 947.37 per cent of the actual tax-income ratio of the salaried man. Similarly the cardamom cultivator's tax –income ratio at that level of income is only 36.32 per cent of the tax income ratio of the salaried people.

Thus it is clear from the table that tax burden of the pepper, cashew and coconut cultivator having income up to Rs100001/ is much more than that of the salaried people having similar income. Rubber cultivator having Rs 25001/ also has more tax burden than the salaried man. All other cultivators have less tax burden compared to the salaried people of comparable income. It is also clear that as income increases agriculturists have lesser and lesser tax burden. Or in other words inequality in tax burden increases as income increases: rich salaried man is paying much more than the rich agriculturists.

The analysis shows that if taxation of the salaried group is the criterion of taxation all cardamom cultivators, tea cultivators having 1 hectare or more, Rubber cultivators having 2 hectares and coffee cultivators with 2 or more hectares can be taxed more.

If entry into personal income tax is the reference point, pepper cultivator with 17.52 hectares, cashew cultivator with 8.36 hectares, cardamom with 0.68 hectares, coffee with 4 hectares, tea with 1.4 and 1.84 hectares respectively for individual cultivators and tea estates, coconut with 7.97 hectares and 9.92 hectares respectively for rain fed and irrigated crop and rubber cultivator with 3.56 hectares be taxed more.

At the income level of Rs.150000/- a cardamom cultivator is paying a direct tax just 1.02 per cent of what the salaried man is paying. Even the pepper cultivator at that level pays only 26.8 per cent of the direct taxes paid by the salaried class. As the income increases gap in the direct tax payments of the two groups widens salaried group paying much more than the agriculturists..

The analysis shows that at lower levels of income cultivators of some crop bear more tax burden than the salaried income groups. At higher levels of income (Rs. 150000/- and above) there is large inequality in the tax burden; agricultural sector is paying very less compared to the salaried group. Cultivators of crops like cardamom, tea and rubber are taxed comparatively less.

## **5.7 Conclusion**

Following conclusions can be derived from the analysis. Small and marginal farmers (less than 2 hectares) except in cardamom, tea and to an extend rubber, have very low-income levels. Though their tax-income ratio is low cannot be

taxed further. Crops like cardamom, tea and rubber are taxed lightly. There is considerable intra-sectoral inequality in taxes in agricultural sector.

There are, though limited, pockets of plenty and affluence among the agricultural sector who have untapped tax potential. Poor among the agricultural sector bears more tax burden than the poor among the salaried class. Richer among the agricultural sector are bearing less burden of direct taxes than the richer among the salaried group. The inter-sectoral inequality in tax between the richer is large and rich agriculturists pay very little as direct taxes.

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## CHAPTER VI

# EFFECTIVENESS OF THE ADMINISTRATIVE SYSTEM FOR AGRICULTURAL TAXES

### 6.1 Introduction

Efficiency in tax collection is an important aspect of the tax administration. Theories on efficiency in taxation explain how to raise tax revenue with a minimum of effort. Economy in taxation is one of the basic principles of taxation.

Adam Smith<sup>1</sup> the first to introduce the canons of taxation considered economy in taxation as one of the four basic canons, others being equity, convenience and certainty. According to Otto Eckstein<sup>2</sup>, there are three principal qualities for a good tax system, namely certainty, enforceability and minimum compliance and collection cost.

An analysis of the economy in taxation naturally percolates to a study of the cost of collection of taxes. A discussion on the efficiency of the tax administrative system should include backlog of works in various offices, number of tax returns handled, each stage of the work etc. In this chapter, we concentrate on these aspects of the agricultural taxes in Kerala.

### 6.2 Costs of Tax Collection

Undoubtedly a good tax should involve a minimum cost. Taxing process should be efficient. The tax administration should not be wasteful and the compliance cost for the taxpayer should not be unnecessarily high. According to

---

<sup>1</sup> Adam Smith, *The Wealth of Nations*, BookV, Chapter II, PartII,(Newyork:Dulton,1910)

<sup>2</sup> Otto Ekstein, *Public Finance*, (New Delhi: Printice Hall of India Pvt.Ltd,1987),p51..

A.R.Prest<sup>3</sup> administrative efficiency of the tax implies the minimization of the amount of real resources needed to administer any type of expenditure.

Every tax has cost attached to its collection and cost of collection comprises of administrative costs, compliance cost, operating cost, efficiency cost etc. In the following section we are considering the different cost concepts and their implications.

### **6.2.1 Administrative Cost**

Administrative cost refers to the cost incurred on personnel and equipment required for the assessment and collection of taxes. A good tax system should provide desired quality of services at minimum cost.

Administrative cost can be reduced/minimized by the choice of appropriate technologies and administrative procedures. Increased computerization can reduce costs and provide more detailed information. Auditing of a limited number of selected returns should be so designed that it makes enforcement most effective. Administrative cost is obviously subject to large economies of scale. Similarly, more complex the tax structure, more difficult it is to be administered and less efficient the administrative system is likely to be and the administrative cost tend to increase.

### **6.2.2 Compliance Cost**

Compliance cost refers to the cost incurred by the individuals in maintaining proper accounts/records, keeping/paying tax practitioners, time used to fill the relevant form or try to think ways of filling them in a way which are least disadvantageous to themselves (tax avoidance). This includes time, effort and

---

<sup>3</sup> A.R.Prest,*Public Finance in Theory and Practice*, Vth edition, (English language Book Society and Weidenfield and Nicolson,1974),p.141..

money used for proper tax planning. Thus, compliance cost means the time and trouble caused to the general body of taxpayers and their advisors.

As in the case of administrative cost, compliance cost also tends to increase with more complex tax structure. Therefore, there should be a proper balancing of equity considerations, which may call for a complex law and saving in compliance cost, which goes with simplification<sup>4</sup>. Administrative cost together with compliance cost determine the operating cost<sup>5</sup>

According to Otto Ekstein<sup>6</sup>, since the compliance costs to the tax payers and the collection costs to the government add nothing to the national output, resources should not be wasted on them.

### 6.2.3 Efficiency Cost

A tax interferes with economic decisions and can distort efficient choice. This distortion is burdensome to the taxed, while being of no help to the treasury. Efficient policy should therefore minimise this burden referred to as excess burden, dead weight loss or efficiency cost. According to Richard M. Bird changes in economic behaviour induced by taxation reduce the real level of well-being every bit as much as does the using up of real resources in collecting the taxes in the first place.

If taxes are to be related to ability to pay, they must be based on economic indices such as income, consumption or wealth. Equitable taxation must therefore be based on economic activity and as such inevitably influences economic choices,

---

<sup>4</sup>Richard A Musgrave and Peggy B Musgrave, *Public Finance in Theory and Practice*, Fifth Edition, (New Delhi: McGraw Hill Book Company, 1989), P.279.

<sup>5</sup>Richard M Bird, "Tax Administration and Tax Reforms: Reflections on Experience" in *Tax Policy in Developing Countries*, ed. Javad Khalilzadesh-Shirrazi Anwar Shals, A World Bank Symposium, (Washington D.C: The World Bank, 1991), pp.38-56

<sup>6</sup> Otto Ekstein, Op. Cit., p.51.

thereby causing an excess burden. The task of tax policy is to reach a compromise between both criteria. Among equally equitable taxes the more efficient one (with less efficiency cost) should clearly be used, but a less efficient one may be preferable if the trade off between equity and efficiency so indicates<sup>7</sup>.

Optimal taxation is that which minimises excess burden and may comprise a complex set of taxes and rates.

#### 6.2.4 Social Cost

A discussion on the cost of taxation would be inconclusive without a reference to the social costs. According to Ray M. Summerfeld<sup>8</sup> social cost constitutes the mental and emotional strain associated with many tax decisions. It also includes the real cost of concealing income or sales (tax base) from tax authorities or in other words the expenses incurred for tax evasion. This cost of taxation has two aspects:

- (a) the amount spent by individuals for evading taxes such as paying bribes or hiding the entire tax base;
- (b) loss in the government revenue.

It is suggested that for every \$1 in bribes received by tax officials, government lose \$20 in tax revenue<sup>9</sup>. The cost to tax payers of evading direct taxes in those countries was as low as 5 per cent of the tax evaded. Thus, the concept of cost includes wider issues such as a reduction in leisure, as a result of public

---

<sup>7</sup> For detailed discussion, see Richard A. Musgrave and Peggy B. Musgrave, *Op. Cit.*, pp.280-293.

<sup>8</sup> Ray M. Summerfeld, Hershel M Anderson, Horace R Brock, *An Introduction to Taxation* (New York: Harcourt Brace Jovanovich, Inc., 1972), p. 33.

<sup>9</sup> Malcolm Gillis, "Social Cost" In *More Taxing than Taxes: Implicit Taxation in Developing Countries*, ed. Richard M. Bird (San Francisco: Institute for Contemporary Studies, 1991), p.42.

efforts to avoid or evade tax payments, efficiency loss, decrease in social satisfaction, etc, i.e., the cost is not confined to administrative and compliance cost.

### **6.3 Cost of Agricultural Taxation in Kerala**

The two taxes that are considered strictly as taxes on agriculture are Agricultural Income Tax and Land Revenue in Kerala. Here, we try to measure the cost of collection of these two taxes.

#### **6.3.1 Land Revenue**

The evolution and system of Land Revenue was discussed in detail in Chapter IV (Section 4.2.2). The features of the land revenue system in Kerala can be summarised as

- (i) Land revenue is collected through the village offices in Kerala.
- (ii) These village offices have a number of functions to perform and land tax collection does not get the required attention from the village offices.
- (iii) Land tax collection can be increased if proper effort is employed even at the existing rate of taxation.
- (iv) Effort involved and therefore the cost incurred in the collection of land revenue in each village office cannot be separated and this makes a study of cost of collection of land revenue impossible.
- (v) Tax varies among Gramma panchayats, Municipal and Corporations areas.

The magnitude of responsibilities assigned to the village offices are so huge that the entire amount spent on them are meagre in terms of the services rendered to the people. Collection of land revenue is a very insignificant (though the amount collected in 2001-02 Rs 4358/- lakhs is not insignificant in a resource scarce state) duty performed by the village offices and the expenditure portion that can be assigned to the land tax collection will naturally be very little. What we want to state is that village office is an institution that is to exist with its manifold functions even if land tax is not collected through it. Therefore, we should conclude that land tax collection does not affect considerably the expenses incurred on village offices.

This is because there is no one in the village office specially assigned to collect land revenue. Tax is collected when the land owner goes to the village office to pay the tax; land owner goes to pay tax only when the 'tax receipt' is essential for activities such as getting a loan from the bank by pledging the land, to get a nativity certificate, to get a possession certificate, to get the number for a building constructed etc.

Thus, we know that the administrative cost of land revenue is not easily separable and it is low as collection is made with no extra effort, personnel or facilities.

Compliance cost also is the minimum as the tax is levied on the area of land held by the individuals and the village offices have the documents of land holdings. Therefore, the individuals need not go through the filing of returns and keeping and preparing documents to support the returns. Individuals can go to the village office as and when needed and pay the land tax. So there is no wastage of time. Actually, many individuals go to pay the land taxes occasionally in four or five years or even more. There isn't anything to be proved for the assessment of

the tax. The village offices, which have the records of land possessed by each person in the village will fix the tax on the basis of the area owned by each individual and the person just need to pay. There is no scope for overestimation or under estimation of the tax to be paid. The only compliance cost, there fore, would be the transportation charge required for reaching the village office. There fore we do not attempt to study the compliance cost also.

Efficiency cost also is very little as the rate of land tax is nominal and the agriculturists do not consider land tax as burdensome. So it does not affect the incentive to work or save. So land tax at present does not distort production or consumption in the economy.

The social cost also is very little. As the rate of land tax at present is negligible people are not concerned about tax evasion and the village officials cannot do much favour for helping the agriculturists to evade or avoid land tax.

### **6.3.2 Agricultural Income Tax**

The evolution of the system of Agricultural Income Tax in Kerala was explained in Chapter IV (Section 4.2.1). There are at present two types of Agricultural Income Tax payers

- (i) who can opt for compounding the income on the basis of the area of land holding and
- (ii) who have to pay tax on the basis of their income earned from agriculture.

Therefore, in addition to administrative cost there is also compliance cost in the case of Agricultural Income Tax. In the case of the first type mentioned above collection cost may be minimum as the tax is based on the area of land held and

the ownership of land has valid documents and therefore there is little scope for arbitrariness. But the taxpayers have to prove the extent of each crop cultivated in each piece of land and change in the cropping pattern. This requires time and effort.

In the case of second stream of taxpayers, they have to keep proper accounts and records to support and prove their taxable capacity. They may require the help of experts to maintain proper accounts of cost of cultivation, price, net income, taxable income etc. Therefore, in this case, compliance cost would be high.

We do not attempt a measurement of compliance cost because of many difficulties such as

- (i) lack of proper accounting practices of the farmers, majority of whom are ignorant
- (ii) data on time and effort taken to file the returns are not available
- (iii) Cost/opportunity cost of such time and effort are not properly quantifiable or measurable.

Similarly, Agricultural Income tax also has efficiency cost. Though supply of agricultural products are said to be inelastic, it is not perfectly inelastic. In the very short term, it may seem inelastic to price or income. But, there are many factors, which make production and supply elastic even in the short run. Use of fertilisers, intensive cultivation practices, etc. can be adjusted to price and income variation. The productivity of rubber was 1576/ha in 2000-01 when the price was less than Rs. 30/- per k.g. But it increased to 1592/ha in 2002-03<sup>10</sup> (Trend, August

---

<sup>10</sup> *Trend*, Rubber Board News Bulletin, ( Kottayam: Rubber Board, August, 2003).

2003). This means that output is responsive to prices. This shows that output, cropping practices and patterns are influenced by the income generating capacity of farming. Therefore, we can logically conclude that Agricultural Income tax, which cuts into the income of the farmer, distorts production and farming practices.

But here too we do not attempt to quantify the efficiency cost of Agricultural Income Tax, again due to many difficulties such as

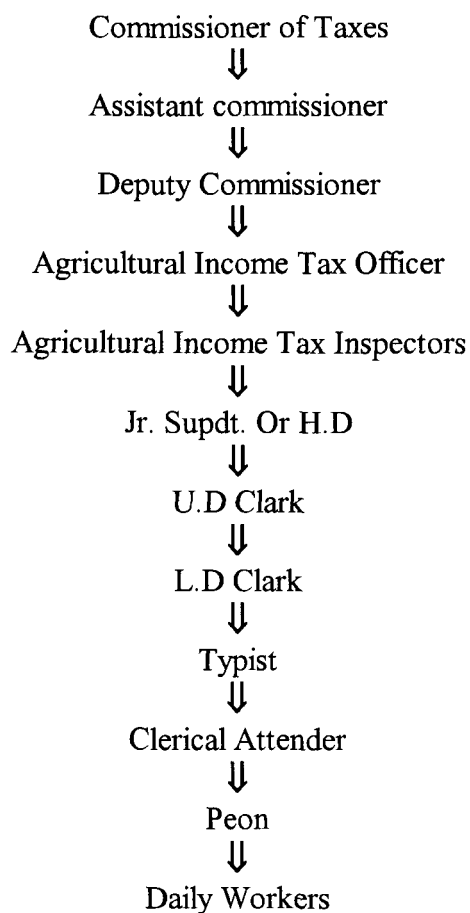
- (i) there is no method to establish that there is a one to one relation between change in production and Agricultural Income Tax.
- (ii) Agricultural production is influenced by many factors such as climate; price variation etc. and we cannot isolate the impact of Agricultural Income Tax from other influences on production.

Social cost of Agricultural Income Tax is said to be very high - as income from agriculture is not easy to be found out. High arbitrariness can be exercised so that the Agricultural Income Tax Officer can manipulate and harass the agriculturists who do not please them; the ignorance of the farmers, price fluctuation, output variation etc. add to the confusion.

It is also argued that if agriculturists are not taxed properly there will be large-scale tax evasion by businessmen and corrupt bureaucrats who consider agriculture as safe haven of tax evasion as they can show agriculture as the source of their earning. A quantification of social cost also is very difficult. So we desist from making such an attempt.

We agree that Agricultural Income Tax in its both forms does have all the above costs attached to it. But, we limit our study only to the administrative cost of Agricultural Income Tax.

Agricultural Income Tax in Kerala is collected through the Department of commercial taxes and agricultural income tax, i.e., Agricultural Income Tax does not have a separate department. The hierarchy of the department of Commercial and Agricultural Income tax is as follows.



The first three posts in the hierarchy, i.e., Commissioner of Taxes, Asst. Commissioner of Taxes and Deputy Commissioner, handle other taxes also. Therefore, irrespective of whether Agricultural Income Tax is collected or not they exist. We do not enlist the cost incurred on them as the cost on Agricultural Income Tax. This is also because there is no way to distribute the cost incurred on these offices among different taxes handled by them. But as it is clear at the end of the analysis, this has not affected the conclusion of our study.

Different offices (as mentioned in Chapter I (Section 1.4)) collect agricultural Income Tax. We can identify three types of offices that collect Agricultural Income Tax.

- (i) AC Special (Assistant Commissioner): There are two of such offices in Kerala, one at Kochi and another at Kozhikode. These are offices that handle mostly the tax returns of companies and firms that are engaged in agricultural activities. At present AC Kozhikodu handles 77 returns and AC Ernakulam has 82 returns.
- (ii) Agricultural Income Tax offices that handle only tax returns of agriculturists. There are 15 of them in Kerala. It is interesting to note that Idukki district, which is predominantly agricultural, does not have any such office at present. There were a few of them, which were recently closed down and the files transferred to the nearby offices of the third type discussed below.
- (iii) The third type are offices that handle mainly sales tax returns, together with them a few of the files of Agricultural Income Tax are also handled by a clerk. Thus Agricultural Income Tax returns are handled together with sales tax files. Their main function is to collect sales tax. The clerk who handles Agricultural Income Tax returns will handle sales tax collection also since the number of Agricultural Income tax returns and assesseees are very few in number.

Total cost of collection (Administrative Cost) includes wages and salaries including daily wages, telephone bills, postage charges, rent of the buildings (if functions in a rented houses; some of them functions in government buildings such as collectorate or in the buildings where sales tax offices also functions), stationary charges, etc.

The researcher has visited both of the Assistant Commissioners offices at Kozhikode and Ernakulam; all the 15 offices where agricultural income tax alone is collected and 9 (nine) offices where both Agricultural Income tax and Sales tax are collected. Altogether 26 offices were visited and tried to collect the data.

Since our objective is not to evaluate the performance of any single office and to keep the identity of the particular offices confidential we give 'numbers' to each of the above office to quantify the administrative cost of each of them.

Only four of the above offices keep data on the cost of collection of 1990-91 and the study of the change in the cost over the period is based on these offices.

Twelve (12) offices, (eleven Agricultural Income tax Offices and one Assistant Commissioner-special office) provided the cost data for 2002-03. Table 6.1 summarises the data collected from the concerned offices. The table shows that cost, as per cent of gross Agricultural Income Tax collection, varied between 18.62 and 343.4 per cent of the gross collection in 2002-03.

In six of the 12 offices, cost of collection is higher than the total revenue collected. Of the six offices where revenue is greater than cost of collection, cost on the average is more than 60 per cent of the revenue collected.

Some offices reported (not supported by data as they do not have the cost data of the previous years with them) that they had always cost of collection greater than the revenue collected there. Four offices, which had cost data for 1990-91 showed that their cost of collection ranged between 15 and 39.6 per cent of the revenue collected by them.

Table 6.1  
Cost as Percentage of Gross Tax Collected

Year	Agricultural Income Tax Offices											
	1	2	3	4	5	6	7	8	9	10	11	12
1990-91	39.6			22.0	15.6			35.1				
1991-92												
1992-93										187.4		
1993-94												
1994-95												
1995-96												
1996-97												
1997-98	39.2											
1998-99	38.7											
1999-00	182.1											
2000-01												
2001-02												
2002-03	72.5	71.0	18.6	88.2	67.2	85.8	206.0	126.8	237.9	222.2	343.4	294.5
	<	<	<	<	<	<	>	>	>	>	>	>

Note: First six offices (with < mark) show that cost is less than the revenue and the rest (with > mark) show that cost is more than the revenue. Figures are cost of collection as percentages of revenue or tax collected in each office.

Source: Computed on the basis of the data collected from the files of the concerned offices.

One office had cost data for five years and it shows that cost of collection was around 40 per cent in 1991 and shot up to 182.11 per cent in 1999-00 and it declined to 72.52 per cent in 2002-03. Another office, which had cost data for 1992-93 and 2002-03 showed that the administrative cost rose from 187.36 per cent of revenue collected to 222.2 per cent during the period.

From the data collected from the agricultural income tax offices it is found that total tax revenue collected through the twelve offices, which were ready to disclose the data, amounted to Rs 112.45/ lakhs in 2002-03 and the total administrative cost of those offices were Rs 81.35/ lakhs in the same year. Thus it is clear that total revenue collected through the offices is more than cost of maintaining those offices. There fore these offices can be said to be economically viable. But the fact is that the cost of collection of the tax is about 72.34 per cent of the revenue. But if we exclude the cost incurred and revenue collected in the Assistant Commissioner Office, total revenue is less than the total cost; revenue is only 82.97 per cent of the cost. This means that the Agricultural Income Tax offices in the state spend more on tax collection than what they collect as tax.

Table 6.1 shows that Agricultural Income tax offices do not have a uniform cost condition except that even in 1990-91 administrative cost was higher than 15 per cent of the Agricultural Income Tax collected through their offices.

#### **6.4 Comparison of Administrative Cost with that of other taxes and other countries**

In the following section we are trying to compare the administrative cost of agricultural income tax in Kerala with that of some other taxes in some countries at different periods of time. The countries selected for comparison are the U.S.A. and the U.K. The comparison is made with administrative cost of income tax, personal taxes and total tax revenue. After this we have compared the

administrative cost of Agricultural Income Tax with that of Sales tax in Kerala, Tamil Nadu, Karnataka and Andhra Pradesh.

There had been attempts at quantifying the cost of taxation at least in the developed countries. The table below tries to capture the results of some of the studies. Though different costs vary widely among different taxes and among countries the table gives a picture of the extent of cost involved in taxes.

Table 6.2  
Different Costs of Collection in Different Countries for Different Taxes

Administrative cost	Compliance cost	Efficiency cost
1 cent per dollar in the U.S.A in 1989 *	7 per cent of income tax revenue *	15 per cent per dollar *
45 cents per dollars 100 of revenue of income tax in the U.S.A. **		
4 per cent of revenue in the U.K. or 1.5 per cent of G.D.P. in the U.K. ***		20 to 30 per cent of revenue in developed countries ***
Total operating cost of the direct personal taxes in the U.K. is 4 to 7 times the administrative cost ****		

Source: \* Musgrave (1989) p.278, 279 & 296 \*\* Summerfeld, Ray M. (1972 ) p.31. \*\*\* Bird, Richard M (1991) p.41. \*\*\*\* Prest, A. R. (1974) p.141.

Musgrave says that the cost of federal administration for the tax collection was about \$11 billion in USA in 1989. It comes about 1 cent per dollar collected as tax.

Summerfeld estimated the administrative cost of income tax in USA to be 45 cents for every 100 dollars collected as tax in 1970 and goes on to observe that federal income tax is one of the cheapest taxes to collect and the complexity of the tax makes compliance costs very high. According to him, the total cost of the income tax as well as any other tax is anyone's guess.

According to Musgraves compliance cost of personal income tax is about 7 per cent of total income tax revenue. The methodology used for the measurement

was simple. J Slemrod and N Sorum<sup>11</sup> through a survey estimated that tax payers on the average spent 21.7 hours on tax compliance both for account keeping during the year and for the actual process of filing returns. Valuing this time at its average and after tax hourly wage, it was estimated that the average own- cost was \$231. Adding to this, the average cost of professional advice of \$44, the average cost per taxpayer was \$275. The survey showed compliance cost to remain a fairly steady per cent of income thereafter. Applying the average to 97 million tax-paying units arrived at a total of \$26 billion, which is equal to 7 per cent of total income tax revenue of \$380 billion.

Musgraves, even while admitting the difficulty of estimating the magnitude of efficiency cost suggest an overall burden equal to perhaps 15 per cent of revenue for the average tax dollar and substantially higher for the marginal dollar.

Bird says that a study in the UK of the operating costs - public (administrative) and private (compliance), of the tax system found that this cost came about 4 per cent of revenues of 1.5 per cent of GDP<sup>12</sup>.

Bird is also of the view that estimate of efficiency costs are subject to wider variations but opines that most economists agree that efficiency costs are likely to be at least 20 - 30 per cent of revenues collected<sup>13</sup>

A.R.Prest quotes Sandford<sup>14</sup> as estimating that the total cost of operating the system of direct personal taxes in UK was some 4 -7 times as great as the public sector administration cost.

---

<sup>11</sup> J. Slemrod and N. Sorum, 'The Compliance Cost of the US Individual Income Tax System', *National Tax Journal*, Vol.37, No.4, 1984..

<sup>12</sup> See also C.T.Sand ford et al., *Costs and Benefits of VAT*( London: Heinemann Educational Books,1981),p.41.

<sup>13</sup> Richard M. Bird, "Tax Administration and Tax Reform: Reflections on Experience" in *Tax policy in Developing Countries* ed. Javad Khalilzadesh-Shirazi Anwar shah (Washington, D.C: World Bank,1991),p.41.

A close perusal of the table reveals that total cost of taxation is some where between 20 and 30 per cent of the total revenue collected in developed countries: 23 per cent in the USA and 29 per cent in the UK -if we take 25 per cent (the average of 20 and 30) as efficiency cost in the UK. It is also clear that compliance cost is much higher than administrative cost, about 7 times the administrative cost. Efficiency cost is still higher; it being double or more than double the administrative and compliance cost taken together.

The above observation about cost of taxation has a 'health warning' that cost of taxation vary widely among countries, among different taxes, among different periods of time, among different technologies and personnel used for tax administration and scale of taxation. It is also to be noted that these are two developed countries with developed technologies. Therefore the figures given are just sign- posts, which may help to understand the severity of different costs in tax mobilization. It may also help to understand and compare the cost of taxes in different countries and how it varies among different taxes.

In comparison to the costs of collection of different taxes in different countries administrative cost of Agricultural Income Tax in Kerala is very high. The lowest cost is 18.62 per cent of revenue collected and the highest is 343.4 per cent (Office no.11) in 2002-03. Administrative cost on the average was 152.84 per cent of revenue in the twelve offices in 2002-03.

Jose Sebastian's<sup>15</sup> study of cost of collection of Sales tax in the south Indian states (Table 6.3) also shows that it was less than 2 per cent in all the states ever since 1980-81. Administrative cost of Sales tax in Karnataka was just one per cent of the revenue collected. In Tamil Nadu it was 1.32 and in Adhra Pradesh it was 2

---

<sup>14</sup>C.T Sandford, *Hidden Costs of Taxation*, (London: Institute for Fiscal Studies, 1973),p.44.

<sup>15</sup> Jose Sebastian, *Essays on Commodity Taxation*,(New Delhi: Common Wealth Publishers, 4831/24, Prahlad Street, 2002),p.131.

per cent of the revenue. The cost of collection of Sales tax in Kerala also shows a similar figure with less than 1.52 per cent in the same period.

Table 6.3  
Cost of Collection of Sales Tax as Percentage of Gross Collection

Years	Kerala	Tamilnadu	Karnataka	Andhra Pradesh
1980-81	1.51	1.00	NA	NA
1981-82	1.52	1.00	1.25	2.00
1985-86	1.38	1.47	1.36	2.00
1990-91	1.42	1.38	1.00	2.00
1991-92	1.20	1.32	1.00	2.00
1992-93	1.50	NA	1.00	2.00

Source: Jose Sebastian (2002), p.131.

Cost of collection of Agricultural Income tax was above 15 per cent even in 1990-91. This shows that administrative cost of Agricultural Income tax was and continues to be very high in Kerala. The available data shows that the tendency of the administrative cost is to increase. Thus, the principle of economy in taxation is violated here.

The only consoling aspect is that half of the offices have cost of collection less than the revenue mobilised by those offices. The high administrative cost of Agricultural Income Tax questions the rationale of continuing with Agricultural Income Tax in Kerala as it is. But a very important theoretical issue is the question of equity in taxation. Though the contribution of Agricultural Income Tax to the exchequer is negligible and the cost of collection is very high it tries to tax a section of the well to do agriculturists.

When we add the compliance cost, efficiency cost and social cost to the administrative cost the total cost of Agricultural Income Tax may over run the so called social contentment. Therefore, there is scope of further research on these

aspects of total cost of Agricultural Income Tax before we categorically conclude as to how much damage Agricultural Income Tax is doing to the society at large.

## **6.5 Tax Administration**

Although many offices were very reluctant to supply the data despite three or four visits to the offices, some were very cooperative. Many offices do not have the required data for many years. Many offices are functioning in rented buildings and were shifted from one building to another. Therefore, previous files (diary) were not traceable.

It is amazing to note that the offices do not follow a uniform pattern of file keeping. Many offices do not consolidate the details of the tax returns; all offices have a diary for one year giving the required data for the particular year. Data for previous years, if needed can be collected only from the diary of the concerned year. Very often, these files are dumped into the heap of files and are not traceable especially those of the first half of the nineties.

Here, we try to make an assessment only of the administration of the Agricultural Income Tax offices where agricultural income tax alone is collected.

There are some offices that maintain proper and consolidated register giving the details of number of assessees, tax payers, arrears in each year at each stage of action, cost of collection, etc. Those were very helpful in collecting the data. Some offices were very sceptical about the intention of the researcher, as to why data on arrears, cost of collection etc., are to be collected and it took a lot of time and persuasion to convince that the data would be used only for academic purpose and in any case mounting arrear is not due to the failure of the officer, cost situation is not of his making so and so forth. In spite of all these, there were some who did not disclose the details.

Simple arithmetical techniques like ratios, percentages, etc. are used to analyse the data. Here, we try to analyse the composition of the cost of collection, arrears at different stages of action, change in number of assesses, tax payers, etc. The analysis is on the basis of the data collected from 15 offices that deal only with agricultural income tax. It does not include Assistant Commissioner's (special).

### 6.5.1 Tax Payers and Assesseees

There is difference between tax payers and assesseees as all assesseees are not tax payers because some of those assessed may not have taxable capacity and thus be excluded paying tax. Here, we are trying to analyse the change in the number of taxpayers. This is based on the data provided by 5 of the above 15 offices. Only 5 of them keep data on the number of the taxpayers for the period under study. Other offices have data for only a few recent years. Table 6.4 summarises the data.

Table 6.4  
Change in the Number of Tax Payers

Year	Office 1	Office 2	Office 3	Office 4	Office 5
1989-90	897	760	424	1569	NA
1990-91	854	750	421	1490	341
2000-01	411	NA	396	587	503*
2001-02	409	583	392	581	503

Source: Compiled from the Office files.

\* A nearby office was merged with this office and all the files from that office are brought to this office in 2000-01 financial year.

It is seen that there is a sharp fall in the taxpayers in all except one office. This office (fifth) had 341 taxpayers in 1990-91 before the introduction of compounding in Agricultural Income Tax and increased to 503 in 2000-01. But, this should be understood in the background of the fact that in 2000-01 financial

Simple arithmetical techniques like ratios, percentages, etc. are used to analyse the data. Here, we try to analyse the composition of the cost of collection, arrears at different stages of action, change in number of assesses, tax payers, etc. The analysis is on the basis of the data collected from 15 offices that deal only with agricultural income tax. It does not include Assistant Commissioner's (special).

### 6.5.1 Tax Payers and Assesseees

There is difference between tax payers and assesseees as all assesseees are not tax payers because some of those assessed may not have taxable capacity and thus be excluded paying tax. Here, we are trying to analyse the change in the number of taxpayers. This is based on the data provided by 5 of the above 15 offices. Only 5 of them keep data on the number of the taxpayers for the period under study. Other offices have data for only a few recent years. Table 6.4 summarises the data.

Table 6.4  
Change in the Number of Tax Payers

Year	Office 1	Office 2	Office 3	Office 4	Office 5
1989-90	897	760	424	1569	NA
1990-91	854	750	421	1490	341
2000-01	411	NA	396	587	503*
2001-02	409	583	392	581	503

Source: Compiled from the Office files.

\* A nearby office was merged with this office and all the files from that office are brought to this office in 2000-01 financial year.

It is seen that there is a sharp fall in the taxpayers in all except one office. This office (fifth) had 341 taxpayers in 1990-91 before the introduction of compounding in Agricultural Income Tax and increased to 503 in 2000-01. But, this should be understood in the background of the fact that in 2000-01 financial

year, another office was closed down and all the files transferred to this nearby office.

All other offices point to the fact that there is a sharp fall in the number of taxpayers. In the first office, the fall is from 897 taxpayers to 409 (less than half of the number in 1989-90) only 45.59 per cent of the original number exists. In office two, and three the decrease is not as sharp as in the first one. Now there are about 76.7 per cent and 92.45 per cent of the taxpayers (of 1989-90) in these offices. But, in the fourth office, there are only 37.03 per cent of the numbers of taxpayers in 1989-90 do exist in 2001-02. This shows that the number of taxpayers decreased sharply in the nineties.

Change in the number of assesseees also confirms this conclusion. Only three offices keep data on the number of assesseees for the period under study. Therefore, our analysis of the change in the number of assesseees depends on the data collected from these offices. Table 6.5 shows change in the number of assesseees.

Table 6.5  
Change in the Number of Assesseees

Year	Office 1	Office 2	Office 3
1989-90	2271	471	184
1990-91	2116	478	190
2000-01	1415	427	47

Source: Same as Table 6.4

Office 1 in Table 6.4 and 6.5 are the same, and office 3 in Table 6.4 and office 2 in Table 6.5 are the same. All the three offices witness a fall in the number of assesseees. The fall was to 1415 in 2000-01 from 2271 in Office 1, i.e., only 62.31 per cent of the number in 1989. In office 2, fall is not very sharp; about 90.66 per cent assesseees are still there. But, in the third office, fall is very sharp, i.e., only 25.54 per cent of the assesseees are there now.

The fall in the number of assesseees or taxpayers is not due to any negligence on the part of the tax officials. This is mainly due to the change in the tax laws year after year especially after the introduction of compounding. Fall in the agricultural prices, since 1998-99 had resulted in a lenient attitude towards agriculturists and rubber plantation up to 20 hectares were exempted from Agricultural Income Tax in 1999-00; coffee up to 20 hectares exempted in 2000-01 and all crops up to 5 hectares are exempted from Agricultural Income Tax since 2000-01. All these must have resulted in the falling number of assesseees and taxpayers.

### **6.5.2 Arrear Accumulation**

Difference between demand made on the assesseees and tax payment of each year will be treated as arrear of the particular year. This 'arrear' will be at different stage of action such as assessment, some under process called not ripe for collection, some under remission, some might be written off after a few years of litigation. The extent of mounting arrears is a cause of concern. Here, we try to analyse the extent of arrears and the action taken on these arrears. Of the 26 offices visited 15 revealed the extent of the arrears and stages of action on them: 13 of these offices deal with individuals' files and two Assistant Commissioners' office handle returns of companies and firms.

There fore our study takes two directions:

one, based on other 13 offices who deal mainly with individual assesseees and

two, based on the 2 Assistant Commissioner's (special) offices, which deal chiefly on company returns

First we take up the 13 offices that deal with individual's tax return. Table 6.6 gives a picture of the arrears in 13 offices spread over the state.

**Table 6.6**  
**Arrear at Various Stages of Action in Agricultural Income Tax Offices**  
**that deal with Individual assesseees**

Stages of Arrear	Arrears (Rs. Lakhs)	Percentage of Total
Government stay	6.48	0.94
Court stay	91.61	13.29
Other stay	67.08	9.73
Revenue recovery	473.04	68.62
Other action	32.37	4.69
Total	689.29	***

Source: Same as Table 6.4

Total arrears in these offices are Rs.689.29/- lakhs. Of these, government has given stay for payment to Rs.6.48/- lakhs, i.e., 0.94 per cent of the total and payment of Rs.91.61/- lakhs stayed by courts. This is about 13.29 per cent of the total. Stay by others constitutes Rs.67.08/- lakhs i.e., 9.73 per cent of the total arrear. Other stay includes stay by tribunals, tax officials such as Assistant Commissioner of taxes, Deputy Commissioner of taxes, etc. About 68.62 per cent of the arrears have gone through all the formalities of assessment and is pending revenue recovery as assesseees have refused to pay.

Thus the table is clear on a few aspects:

- (i) More than 68 per cent of the arrears have completed all the process of assessment and are at the stage of revenue recovery

---

\* \*\* The third column does not add up to 100 because the components of the table are not mutually exclusive in the sense that court, government and others intervene in each stage of assessment and provide stay. To make it clear we must go a bit further in the direction. The assessment process begins with the demand made by the Agricultural Income Tax office to pay the tax. The assesseees approach the officer concerned and present their case. If there is disagreement they will approach government, Others such as Assistant and Deputy Commissioners of taxation, tribunals and court for slashing the assessment. These institutions intervene at different stages of the assessment. Therefore, amount under revenue recovery may fall under the court stay heading also. Therefore, third column can add up to more than 100, but in this case it does not because office files are not explicit in many aspects.

- (ii) Government intervention and staying of tax payment is less than one (0.94) per cent of the total arrears.
- (iii) Court intervention is the single largest (13.29 per cent) reason for accumulation arrear followed by stay by others which comprises offices like, Assistant Commissioner of taxes, Deputy Commissioner of taxes and Tribunals set up for tax purposes.

Therefore, we may conclude that Agricultural Income Tax offices do not overwhelmingly fail in their responsibility of assessment of tax. Mounting tax arrears are not due to the negligence of the offices concerned. But, the mounting of arrears to an extent is due to the arbitrary assessment made by the tax officials. Very often, the Agricultural Income Tax offices assess an excess amount on the cultivator and the legal process starts with it. This fact is made out clearly from the fact that about 84.24 per cent of the arrears are accumulated arrears from the past. Only 15.76 per cent are arrears from the current year assessment in 2002-2003. Arbitrary assessment had caused accumulation of arrears.

An analysis of the arrear position of the two Assistant Commissioner's offices (special) in Kerala reveals interesting facts. They handle the returns of large firms, companies, trusts, etc. Table 6.7 reveals the arrear position in Assistant Commissioner's offices (AC special) as on March 31, 2003.

Table 6.7  
Arrear at various stages in Assistant commissioners office

Stages of Arrear	Amount (Rs. Lakhs)	Percentage of Total
Government stay	-	-
Court stay	1026.92	27.47
Other stay	1177.21	31.49
Revenue recovery	1686.97	45.12
Total	3738.77	100.00

Source: Same as Table 6.4

Total arrear amount is Rs.3738.33/- lakhs. Court has stayed proceedings on 27.47 per cent of the arrear and others stayed 31.49 per cent. Revenue recovery has been ordered on 45.12 per cent of the arrears.

A comparison of Table 6.6 and 6.7 is interesting and revealing many facts. One should be careful in the comparison that Table 6.7 summarises the total arrears of the two Assistant Commissioners' offices dealing chiefly in big assesseees and Table 6.6 contains data about arrears of 13 offices handling individual files only and there are many others in that category. But, they have not provided the data. So we could not include them for the analysis. Therefore, arrear data of the 13 offices are not complete.

Tables show (6.6 and 6.7) that total arrear accumulated in the offices that assess small individual tax payers is only Rs.689.29/- lakhs where as the two offices that assess the big ones have a mounting arrear of Rs.3738.77/- lakhs. Government has not intervened to stay the arrears of the big ones, whereas in the case of small payers government has intervened to stay (0.94 per cent) of the arrears. This does not mean that there is no political intervention in the case of big assesseees. Government can intervene through the category of others, which include Assistant and Deputy Commissioners of taxation. It is interesting to note that stay given by such authorities in the case of 'big ones' constitute about 31.49 per cent of the total arrear and courts stay comes to 27.47 per cent, where as in the case of small assesseees the respective figures are 9.73 per cent and 13.29 per cent; the stay by court is more in the case of small assesseees than the stay by others, where as in the case of 'big assesseees' stay by others is larger than by courts.

It is also revealing the fact that 68.62 per cent of the small assesseees arrears are at revenue recovery whereas only 45.12 per cent of the arrears of the big assesseees are at the stage of revenue recovery. This may be because of the fact

that big assesseees having the facilities got a stay by approaching the authorities before the assessment reaches the stage of revenue recovery. That means they are able to get a stay.

Total arrears accumulated in (159 assesseees) the two Assistant Commissioners offices are Rs.3738.77/- lakhs where as the total arrears of 13 other offices, which handle individual assessment, are just Rs.689.29/- lakhs. This is only about 18.43 per cent of the big assesseees.

Can we say, in this context, that the Assistant Commissioners offices are less efficient than the other Agricultural Income Tax offices? The accumulating arrear in the Assistant Commissioners may be due two reasons:

- (i) The assesseees of the Assistant Commissioners office belong to the income streams of agricultural income tax, as their area of holding is more than 20 hectares. In the case of income assessment, there is the possibility of arbitrariness and disagreement between assessee and the tax officials. It can lead to litigation and mounting arrears.
- (ii) The big assesseees as we said have the wherewithal to interrupt the assessment process, through court and higher offices. This also might have resulted in the arrear accumulation.

So the accumulation of arrear is not a yardstick for measuring the efficiency of the concerned office or the officer. But only 45.12 per cent of the cases are at the stage of revenue recovery where as in the Agricultural Income Tax office, which handles individual assesseees 68.62 per cent of the cases are at the stage of revenue recovery.

### 6.5.3 Tax Officials and Tax Collection

Another method for evaluating the performance of the tax office is to compare among the tax collection, cost of collection and arrear amount of the offices. Here, we assess the functioning of offices that collect Agricultural Income Tax only. The Assistant Commissioners' offices are not analysed here because Assistant Commissioners office Ernakulam functions as a part of the bigger Department of Agricultural Income Tax and Commercial Taxes and the separate data on Assistant Commissioners' office, that deals with agricultural income tax alone is not available. Offices that collect both Agricultural Income Tax and sales tax are also not studied for similar reasons.

Table 6.8 shows the staff strength of the 15 offices under study. This is the existing staff strength and not the sanctioned staff strength. There is difference between the two because as part of the downsizing of the Agricultural Income Tax offices many of the sanctioned officers are on deputation to other sections of the department. There are altogether 113 employees in these 15 offices, of which 18 are agricultural income tax officers, as there are two officers each in Pala, Kottayam and Kanjirappally.

Table 6.8  
Staff Strength

Name of the Post	Number
Agricultural Income TaxO	18
Inspector	05
Head Clark	11
UDC	21
LDC	20
Typists	10
Peons	20
Clerical Attender	08
Total	113

Source: Same as 6.4

As said above, many posts are left vacant as the number of assesseees and taxpayers have come down. In that respect, we may infer that there is an attempt from the part of the government to reduce the cost of collection.

Next we would try to analyse the expenses on the office including salary of the employees, tax collection in each office and arrears in each office. Of the 15 offices, only 11 have supplied the details on the composition of the cost of maintaining the offices. Others have given the total cost only. Therefore cost analysis is based on these 11 offices. All the offices have provided the tax collected through them.

Table 6.9 gives the total expenditure incurred on the maintenance of eleven Agricultural Income Tax offices in the state and their composition. Total cost is composed of wage, expenditure on postage and stationary charges, and travel allowances paid. There is another element of cost in many of the offices and which is not counted here. This is the rent to be paid for the building in which it is functioning. This is not accounted because in many cases, both sales tax and IT offices are working in the same building for which rent is paid and therefore it is not easy to apportion the rent paid for the Agricultural Income tax offices. In one case the office has a separate rented building and the rent constitutes about 0.02 per cent of the total cost incurred.

It is seen that 98.06 per cent of the cost is used for paying wages and salaries of the employees and only the rest is used for other expenses. This is an indicator of the fact that modern technologies such as computers and even telephones are not in common use in the Agricultural Income Tax offices. This causes unnecessary delays in the assessment process. Total salary bill ranges between 93.77 per cent and 99.69 per cent among the offices.

**Table 6.9**  
Composition of Total Administrative Cost in  
Various Offices

Offices	Total cost (Rs.)	Wages (% of total)	Others (% of total)
A	735047	98.25	1.15
B	1081540	97.52	2.46
C	700000	99.21	0.79
D	483750	98.35	1.65
E	607000	98.01	1.99
F	545143	98.57	1.43
G	200000	93.77	6.33
H	748000	98.59	1.41
I	560448	99.69	0.31
J	942961	99.22	0.78
K	5411088	96.93	2.67
Average		98.06	1.92

Source: Same as Table 6.4

A comparison of the cost and revenue of the 11 offices show that the cost exceeds the revenue. Per capita cost is Rs.88209.59/- while revenue is just Rs.73191.59/-, i.e., revenue is just 82.97 per cent of the cost or cost is 120.5 per cent of the total revenue. Out of the eleven offices, six have larger costs and five have lower costs compared to the revenue. The lowest cost is 67.2 per cent of the revenue.

## 6.6 Conclusion

The analysis showed that the administrative cost of Agricultural Income Tax was very high. The cost of collection varied between 18.62 and 343.4 per cent of revenue collected in 2002-03 in different offices. Cost of collection was high even in 1990-91 when it was between 15.6 and 39.6 per cent of the revenue collected in different offices.

Total collection cost was less than the total revenue collected in the offices under study. But if we exclude the revenue and cost of Assistant Commissioners Offices (Special), which deal with the returns of the firms and companies, total cost is greater than the revenue mobilised through them. Revenue came about 82.97 per cent of the cost of collection. It is also found that out of the 12 offices, which were ready to disclose the data on revenue and cost, 6 had greater cost than the revenue.

Administrative cost of land tax is bound to be very low as land tax is collected through village offices, which have many other functions and land tax collection at present is only a minor function of the village offices. Offices do not spend much time and energy for land tax collection. It is also true that the Administrative cost element of land tax cannot be separated from the total cost of maintaining the village offices.

Arrear accumulation is on the increase. Revenue collection comes about 13.23 per cent of the accumulated arrear in the offices under study. A major part of the arrear accumulation is due to the intervention of the courts: about 13.29 per cent of the arrear in the Agricultural Income Tax offices that handles the individual cultivators and 27.47 per cent of the arrear of the offices that deal with the returns of firms and companies are due to court stay. Government stayed only about 0.94 per cent and stay by others such as Assistant Commissioner, Deputy Commissioner, Tribunals etc. came about 9.73 and 31.49 per cent of arrears respectively in the above offices in 2002-03.

There is an attempt at downsizing the Agricultural Income Tax offices in the state: many posts in the offices are not filled; many officers are on deputation to other offices; many offices are closed down and files transferred to the near by offices.

Ninety eight per cent (98.06) of the expenses on tax collection are on the salary of the staff, 1.92 per cent on stationary and postage and 0.02 per cent is on rent of the building.

On the basis of the data collected it is found that in the Agricultural Income Tax offices (excluding Assistant Commissioners Office) per officer tax collection was less than per officer expenditure on tax collection. Per officer tax revenue is just about 82.97 per cent of the per officer cost of collection.

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

(7)

## CHAPTER VII THE IMPACT OF THE INTRODUCTION OF COMPOUNDING IN AGRICULTURAL INCOME TAX ON TAXATION OF AGRICULTURAL SECTOR

### 7.1 Introduction

Many changes have taken place recently in the tax laws of the agricultural sector. Here we make an attempt to assess the impact of these changes on the performance of agricultural taxes in Kerala. The most important change was the introduction of compounding in the Agricultural Income tax. Agricultural Income Tax Act 1991 permitted the cultivators to opt for compounding for the purpose of Agricultural Income Tax. In that case tax liability of the cultivators would be assessed on the basis of the size of holding and crop cultivated.

Report of the Committee on Taxation of Agricultural Wealth and Income (Raj Committee Report) had suggested the introduction of Agricultural holdings tax (AHT) as far back in 1972. This was an attempt to assess the tax liability of the cultivator on the basis of the rateable value of his holding. (Details of the recommendations are given in Chapter II).

The Committee for Restructuring Agricultural Income Tax Laws in 1988 appointed by the Kerala state Government (Kaleeswaran Committee) went in detail to the way the proposed tax law should be framed to facilitate the agricultural sector to pay agricultural income tax on the basis of the size of holding of a cultivator and crop cultivated in the land (Details of the recommendations are given in Chapter II). Any one who possessed 20 hectares of land could opt for this and all who possessed 3 or more than 3 standard hectares of land had to pay Agricultural Income Tax.

The content of the Act 1991 was much different from the above two Reports and this difference had its impact on Agricultural Income tax collection. First we would give a brief account of the content of the Act and then a comparison among the three documents. This is necessary to assess the impact of the introduction of compounding and after on the tax collection from the agricultural sector in Kerala.

### **7.2.1 Act 15 of 1991: The Kerala Agricultural Income Tax Act 1991**

Act 15 of 1991 namely The Kerala Agricultural Income Tax Act 1991 led to the compounding of agricultural income for tax purpose. Important provisions of the Act are given below.

Assessee is defined to be a person by whom any tax or any other sum of money is payable. Any person who holds landed property within the state extending to not more than twenty hectares and deriving agricultural income will be permitted to compound the agricultural income and pay tax as per the given rates. The permission once granted will be in force for three years unless opted otherwise by the assessee.

Crops such as paddy, tapioca, plantain, ginger, ragi, pulses, sesamum, vegetable, sweet potato, tubers, sugarcane, jack, mango, pine apple, orchid, vanilla, turmeric and guava are exempted from tax. Also identified the following crops such as Coffee, cardamom, cashew, tea, pepper, clove, cinchona, nutmeg, cinnamon, coconut, rubber, cocoa, and arecanut as those that are to pay agricultural Income Tax.

No tax is payable by any crop on the first 3 hectares of cultivation. No tax payable on the replanted area till the plants in this area starts yielding. When there is change in the extent of land during the previous year the maximum extent of

land held for not less than 180 days during the previous year shall be deemed to be the extent of land held during the previous year.

Agricultural Income Tax Officer has to satisfy himself and then permit the application for deductions. People who were compounding their income can re-opt to the income based tax system under certain conditions.

Charitable or religion institutions with more than 20 hectares also can go for compounding (Section 13.7). There are provisions in the Act to exempt these institutions (section 16) from Agricultural Income Tax.

Any person who is permitted to pay compounding of tax be exempted from paying plantation tax. When there are more than one crop in a land the principal crop will be the basis for the tax. There is provision for saving the tax payee from double taxation (section 15):

Any person who is a partner of a firm, or member of an association of person or body of individuals is not liable to pay tax on the share of agricultural income which he received from such firm as a partner or member of such association of persons or body of individuals on which tax was levied and paid by such firm, association of persons or body of individuals under certain conditions. Tax payable on such total agricultural income shall be calculated in accordance with the provisions of this Act after deducting the share of tax payable by him as partner or member out of the tax levied on the agricultural income of such firm.

Government. has the power to change the tax rate, allow exemption etc. by notification in the Gazette. Income of individual is to include income of spouse, minor child etc. Rate structure of the tax etc., are given in the next section.

### **7.2.2 Assessment of the Act in the light of the Reports of the Committees, which recommended compounding**

Kaleeswaran Committee, which recommended compounding of income up to 20 standard hectares of land was influenced by Raj Committee Report's concept of AHT (Agricultural Holdings Tax). Kaleeswaran Committee Report was supposed to be the reference point of the Agricultural income Tax Act 1991. But a close scrutiny of the three documents reveals that the Agricultural income Tax Act 1991 absorbed only very little from the above mentioned studies, which were more professional and academic in their nature and approach. Kaleeswaran Committee Report though more bureaucratic in its content tried to be as rational as possible as the Raj Committee Report. The Agricultural income Tax Act 1991, had diluted many of the recommendations of the official committees and were more political in its content. Let us consider some major areas of departures and which have a direct bearing on the Agricultural Income tax system and tax collection.

Raj Committee wanted to classify every holding on the basis of productivity and crops grown in a region and estimate its income considering variations in price. Agricultural holdings with a rateable value of Rs. 600/- or above in 1972 would be assessed and an appropriate rate would be applied to find out the taxes to be paid by each holding. There are strict norms for arriving at the rateable value of each holding (pp 106, 107 and 108). This led to a lot of complexities and arbitrariness. In order to make assessment simpler Kaleeswaran Committee tried to standardize each holding on the basis of the crops grown and difference in the productivity of land in various regions (for cardamom). The Committee recommended two systems of taxes –

One, compounding of income up to 20 standard hectares. Here income is not assessed but a rate is fixed assuming a given income from every standard hectare of land on the basis of the type of crop cultivated and second, income based

assessment for holdings above 20 standard hectares and for companies, other corporate bodies and co-operative societies. .

The Agricultural Income Tax Act 1991 changed the concept of standard hectares to ordinary hectares and individual holdings up to 20 hectares are permitted to have compounding; trusts for charitable or religion purposes also are allowed to avail of this provision.

The shift from standard hectares to ordinary hectares is a major change with lasting impact on tax collection in a state like Kerala where land reform measures are successful and as a result size of holding has come down sharply. For example one hectare of rubber plantation, according to Kaleeswaran committee ,would be equal to 1.5 standard hectares and one hectare of cardamom in A zone equal to 3 standard hectares. But the Act did not differentiate between standard and ordinary hectares. This has considerably reduced area of land that could be taxed.

Tax exemption provided to holdings below 3 hectares as against 3 standard hectares of Kaleeswaran Committee recommendations should be evaluated in this context. This is in the backdrop of Raj Committee recommending to tax at Re. 1/per holdings with a rateable value of less than Rs. 600/- per year.

The Kaleeswaran Committee allowed a rebate of 2.5 per cent annually for re-plantation but did not allow tax holiday for the immature plants. The Agricultural Income Tax Act 1991 declared tax holiday for the immature plants. The recommendation of the Raj Committee allowed non-payment of Agricultural Holdings Tax by unyielding land or plants.

The Kaleeswaran Committee's standardisation of land permitted uniform tax rate for similar holdings and a progressive rate for larger holdings. The element of arbitrariness was less here. The Act fixed different rates for different crops

without any scientific basis and without considering the level of prices of different crops.

Raj Committee recommended to consider family holding as one unit and levy the charges, whereas the Kaleeswaran Committee was for individual holdings to be assessed and the Act 1991 followed the Kaleeswaran Committee recommendations. Raj Committee recommendations if followed would have increased the tax burden of the family and this would have been an injustice at least for the middle class families, which would have many members whose only source of livelihood is the family property. This is in contrast to the personal income tax where it is the income of the persons and not the family that is assessed; in a family where both the spouses are employed it is not the income of the family that is assessed for income tax but the income of both assessed separately and taxed. So Kaleeswaran Committee was more reasonable in this respect and the Act 1991 did what was right.

In the case of Charitable and Religious Trusts, Raj Committee (Sect. 3.45) and Kaleeswaran Committee (7.5 p.40) were against giving any special treatment and recommended to tax them properly. But the Act 1991 (16.1, p.18) exempted the agricultural income earned by them from Agricultural Income tax under certain conditions.

Therefore, the Act 1991 diluted many of the recommendations of the Raj Committee and Kaleeswaran Committee, which put forward the idea and modalities for compounding the agricultural income on the basis of the size of holding of the agriculturalist. This could be one of the reasons for the falling collection of Agricultural Income Tax ever since compounding was introduced in 1991.

One of the main objectives of the Agricultural Holdings Tax and compounding system of tax was to avoid the harassment of agriculturists by officers but the Act 1991 underlines the importance of tax officials' personal verifications of the farms and harassment has not disappeared. Agricultural Income Tax offices still have high clout and tax procedures are not simplified fully.

### **7.3.1 Compounding and After**

As mentioned in the preceding section, compounding of agricultural income was allowed for Agricultural Income Tax purposes for individuals whose holding was below 20 hectares of land through Agricultural Income Tax Act 1991 and it came into practice on April 1, 1991. Tax liability of a cultivator is assessed on the basis of the area of land he owns and crop that is cultivated on it.

The rate fixed in the Act is given in Table 7.1. The Act envisages that there be periodic revision of the rate<sup>1</sup> considering the fluctuations in price and the changes in the agricultural sector. There had been a lot of changes in the agricultural sector of Kerala ever since 1990-91. The Act has undergone a number of changes. Agricultural prices moved very sharply. The prices of almost all crops except tea skyrocketed till 1997-98 and nose-dived since then till 2000-01. Now the price of many crops except those of tea, areca nut, coffee and cardamom show upward trend, rubber showing the highest increase.

---

<sup>1</sup> Act 15 of 1991, p.24.

Table 7.1  
Compounding Rates of Tax

Name of Crop	On the first five hectare. Rate per hectare* (Rs.)	On the next five hectares (above 5 hectares but not exceeding 10 hectares) Rate per hectare (Rs.)	On the next five hectares (above 10 hectares but not exceeding 15 hectares) Rate per hectare (Rs.)	On the next five hectares (above 15 hectares but not exceeding 20 hectares) Rate per hectare (Rs.)
Coffee, cardamom, etc.**	350.00	500.00	900.00	1500.00
Coconut, Rubber, Cocoa	600.00	1100.00	1800.00	2700.00
Cardamom B' Zone	600.00	1100.00	2100.00	3000.00
Cardamom A' Zone	800.00	1300.00	2800.00	3700.00

Note: Note:\* Provided that no tax is payable on the first three hectares, P.16 of the Act 15 of 1991; \*\*- This list includes coffee, cardamom C' Zone, cashew, tea, pepper, clove, cinchona, nutmeg, cinnamon etc.

Source: The Kerala Agricultural Income Tax Act 1991, Act 15 of 1991, P15.

The above Act had undergone many changes ever since it was passed. Main changes are:

1992-93 Budget speech<sup>2</sup> exempted those farmers, who could not or did not avail the compounding system of Agricultural Income Tax from plantation tax on land below 3 hectares. This was a facility enjoyed by those who are in the compounding system (Clause 13 section 10 of the Act 15 of 1991). Exemption limit for those remained in the income stream raised from an income of Rs. 22,000/- to Rs. 28,000/-. These changes came into effect through Act 8 of 1992 from April 1, 1992.

Budget Speech 1993-94<sup>3</sup> allowed partnership firms with 100 hectares to compound their income. It was also suggested that total cost of temporary sheds

<sup>2</sup> Budget Speech 1992-93, pp.57-58.

<sup>3</sup> Budget Speech 1993-94, pp.57-58.

constructed and gratuity and bonus paid be deducted from agricultural income for purposes of Agricultural Income Tax. This was implemented through Act 13 of 1993.

Budget Speech 1994-95<sup>4</sup> extended the facility of compounding to tenants in common with the condition that all tenants should opt for it and the share of each tenant together with his individual property shall not exceed the limit prescribed for compounding. Plantation companies were allowed to deduct 50 per cent of income from taxable income if invested in industrial concerns in the state for five years and these investments should not be in agricultural sector. These were implemented through Act 19 of 1994.

1995-96 Budget speech exempted coconut from Agricultural Income Tax for one year and the exemption limit increased to Rs. 40,000/- from Rs. 28,000/- for Agricultural Income Tax. Act 5 of 1995 shows that there was also a revision of tax rate.

Budget Speech 1998-99 proposed a rate slashing for rubber and Act 14 of 1998 shows that rate reduction was made also for cardamom as follows<sup>5</sup>. The rate of Agricultural Income Tax for domestic companies reduced from 65 per cent to 60 per cent.

Budget Speech 1999-00 extended the compounding facility to all including companies holding an area up to 500 hectares. But this will not be provided to those who split the existing companies and form new companies. It was made effect through Act 23 of 1999<sup>6</sup>. Rates reduced for all crops in all slabs of compounding. New rates are given in the following table.

---

<sup>4</sup> Budget Speech 1994-95, p.56

<sup>5</sup> Act 14 of 1998, p.184.

<sup>6</sup> Act 23 of 1999, p. 548.

Rubber up to 20 hectares exempted from Agricultural Income Tax for this financial year.

Table 7.2  
New Rates of Agricultural Income Tax from 1999

Crop	First 3 hect.	Next 5 hect.	Next 5 hect.	Next 5 hect.	Next 500 hect.
Cashew, Clove	Nil	300	450	800	1400
Pepper	Nil	400	600	1000	1750
Coconut, cocoa, Rubber	Nil	500	1000	1700	2500
Cardamom B	Nil	550	1000	2000	2800
Cardamom A	Nil	750	1200	2700	3500
Arecanut	Nil	750	1200	2700	3500
Tea	Nil	350	500	900	1500
Coffee	Nil	700	1000	1800	3000

Source: Act 23 of 1999, Annexure -1.

Budget Speech 2000-01 allowed rubber up to 20 hectares to enjoy exemption from Agricultural Income Tax for another year. Coffee up to 20 hectares also was exempted for one year. Budget Speech also proposed to exempt all farmers possessing up to 5 hectares from Agricultural Income Tax with effect from 2000-01 accounting year. These proposals were implemented through Act 7 of 2001<sup>7</sup>.

### 7.3.2 The Impact of the Changes

Introduction of compounding and the changes effected to it must have its impact on the Agricultural Income Tax collection in the state. We are trying to analyse the impact of changes to the Agricultural Income tax system mainly on the revenue collection, changes in the cost of collection and responsiveness of tax collection to various determinants of the tax.

It is difficult to establish a one-to-one relation between changes in the collection of Agricultural Income Tax and introduction of compounding and the changes there after. This is because of the fact that there are many factors that

<sup>7</sup> Act 7 of 2001, p.119.

affect tax collection and compounding was permitted at first only to those persons having land up to 20 hectares. People having land over and above this had to continue with the income-assessment scheme already in practice.

But, the only major change that occurred and that will have an impact on Agricultural Income Tax collection was the Act 1991 and amendments to it. Therefore, one can reasonably attribute the changes (if any) in tax front to the switch over from income stream to the compounding stream of assessment brought about by the Act.

We are depending on secondary and primary data for evaluating the performance of Agricultural Income Tax situation in the nineties. Tools like compound growth rate, tax income ratio, per cultivator tax collection, ratio of Agricultural Income tax to Total revenue, Total tax revenue, State's own tax revenue, and Own revenue are used to evaluate the change before and after the introduction of compounding. Responsiveness of the tax system was studied in relation to Agricultural Income by working out the elasticity. Response of the Agricultural Income Tax to price variation, cost of cultivation, terms of trade, net cropped area are studied by comparing the growth rates of the above variables with that of Agricultural Income Tax. Simple and multiple regression are also done to analyse the data.

Secondary data are used for:

- (a) finding the compound growth rate of Agricultural Income Tax immediately preceding and succeeding years of compounding to see whether there is considerable change in the growth rate,
- (b) working out ratios to see whether relative share of Agricultural Income Tax in various revenue and tax variables have undergone considerable variation before and after the introduction of compounding system,

- (c) analysing whether the responsiveness of the tax system have undergone tremendous change in the period.

Secondary data on size of holdings are used to establish whether the exemption provided to land holdings up to 3 hectares (as against the Kaleeswaran Committee recommendations of 3 standard hectares) from paying Agricultural Income Tax had any impact. This is done by the analysis of the size of holdings in the state. Primary data collected through the family survey are used to examine whether cultivators have resorted to fake partition and division of land for evading Agricultural Income Tax. Family survey gives data on the partition of land since 1993

In order to study the change in the cost of tax collection, data is collected from the files of the agricultural Income Tax offices. (A detailed discussion of how data collection from Agricultural Income Tax offices is done, and is given in Chapter-VI on cost effectiveness).

### *Agricultural income Tax in the Nineties*

This section deals with major variations occurred to Agricultural Income Tax collection and try to analyse the role played by compounding system in these changes.

#### *(a) Growth Rate:*

The compound growth rate of Agricultural Income Tax is taken in ten- year periods to see whether nineties are different from the earlier decades. Table 7.3 gives compound growth rate of Agricultural Income Tax in decades starting from 1961-71. Last one is the average growth rate in the 41 years from 1960 to 2001.

Table 7.3  
Compound Growth Rate of AIT

Years	Growth rate
1961-1971	3.98
1971-1981	17.93
1981-1991	4.12
1991-2001	1.27
1960-2001	7.09

Source: Compiled from various issues of R.B.I Bulletin.

The decade 1991-2001 has a growth rate of 1.27 per cent in the Agricultural Income Tax collection. This is in comparison to the tax collection in the eighties where the growth rate was 4.12 and an overall average growth rate of 7.09 per cent from 1960 to 2001. Growth rate had declined from 17.93 per cent in seventies to 4.12 in the eighties. The fall in the growth rate in the nineties is very grave. Thus it is clear that the nineties had a dismal growth rate compared to the all year growth rate (7.09) and also compared to all other decades.

This is a period when prices of agricultural commodities showed tremendous fluctuation, increasing to the peak in 1998-99 and falling there after to the slump by the end of the decade 1999-2000. Therefore, fall in price and income cannot be considered as the reason for fall in the average growth rate in this period.

**(b) Per Cultivator Agricultural Income Tax:**

Agricultural Income Tax per cultivator is found out by dividing the total agricultural income tax collected by the number of cultivators (both male and female) in that year. Census Reports provide data on the number of cultivators only for 1991 and 2001 and not for the interim years. The number of cultivators in 1991 was 1015983 and in 2001 it was 740403. Table 7.4 shows the per-cultivator Agricultural Income Tax in Kerala. It was Rs. 235.6/- in 1991 and Rs. 337.65/- in 2001. Per cultivator Agricultural Income Tax seem to increase even in the nineties,

when the rate of growth, as pointed above was very meagre. But this is due to the huge fall in the number of cultivators from 1015983 in 1991 to 740403 in 2001. There is about 27.12 per cent fall in the number and per capita tax should naturally be higher. There is a fall in the number of cultivators by about 275580.

Table 7.4  
Per Cultivator Agricultural Income Tax

Year	Rs.	Growth Rate	No. of cultivators	Growth rate
1961	19.9	-	1178103	-
1971	29.6	48.74	1106663	-6.06
1981	127.1	329.39	887232	-19.83
1991	235.6	85.37	1015983	14.51
2001	337.7	43.31	740403	-27.12

Source: Computed from various issues of R.B.I. bulletin and Census Reports

**(c) Agricultural Income Tax's Contribution to State Revenue:**

Revenue of a state is composed of tax and non- tax revenues. Tax revenue in turn depends on different types of taxes including Agricultural Income Tax. In this section, we try to see the share of Agricultural Income Tax in total revenue, total tax, etc. This will show the changing importance of the tax in the resource mobilization in the state. Table 7.5 summarises the share of Agricultural Income Tax in total revenue, total tax revenue, state's own tax revenue and own tax revenue in the years immediately preceding the implementation of compounding system and a few selected year succeeding it.

Table 7.5  
Share of Agricultural Income Tax in State Revenue in the Nineties

Years	AIT/TR	AIT/TTX	AIT/STX	AIT/OR
1990-91	0.010	0.013	0.018	0.0150
1991-92	0.012	0.016	0.020	0.0180
1995-96	0.005	0.006	0.008	0.0067
1999-00	0.002	0.002	0.002	0.0020
2000-01	0.003	0.003	0.004	0.0036

Source: Computed from various issues of R.B.I. Bulletin

As the table shows, the share of Agricultural Income Tax in the total revenue in all the above years are very little, always around or less than 0.01 per cent. Even this little contribution came down further, since the introduction of compounding to 0.005 in 1995-96 and then to 0.003 in the last year of the decade. The share decreased to less than 50 per cent of what it was in 1990-91.

This is true for the share of Agricultural Income Tax in total tax (AIT/TTX) also, as the share fell from 0.013 to 0.002 and 0.003 in 1999-2000 and 2000-01 respectively. Share of Agricultural Income Tax in state's own taxes (AIT/STX) also is not different. It was 0.018 in 1990-91, 0.02 in 1991-92 and fell to 0.008 in 1995-96 and further to 0.002 and 0.004 in the last two years of study. The percentage of Agricultural Income Tax in own revenue (AIT/OR) also tells the same story: a fall from 0.015 in 1990-91 to 0.0067 in 1995-96 and to 0.002 and to 0.0036 in 1999-2000 and 2000-01 respectively.

Agricultural Income tax's contribution to Total tax revenue of the state in 2000-01 is only 23.07 per cent of what it was in 1990-91. Its contribution to the State's own tax revenue is only 22.22 per cent of what it was in 1990-91. Agricultural Income tax's contribution to State's Own revenue in 2000-01 is only 24 per cent of what it was in 1990-91.

Table 7.6 presents the averages of the above shares in the last four decades of the revenue history of state. The average share of Agricultural Income Tax in total revenue (AIT/TR) in the 1960s was 0.033 and it fell sharply to 0.0048 in the nineties. This means that Agricultural Income Tax was about 3.33 per cent of the total revenue in the sixties and it fell considerably and it is only 0.48 per cent in the nineties.

Table 7.6  
Average Share of Agricultural Income Tax

Average	Average AIT/TR	Average AIT/TTX	Average AIT/STX	AIT/OR
1961-1970	0.0333	0.0559	0.0739	0.0514
1971-1980	0.0185	0.0286	0.0404	0.0301
1981-1990	0.0119	0.0161	0.0224	0.0171
1991-2001	0.0048	0.0061	0.0081	0.0071

Source: Same as Table 7.5.

Share of Agricultural Income Tax in total tax fell from 5.5 per cent to 0.61 per cent in the same period; share in states own tax fell to 0.81 from 7.4 per cent and the share in own revenue decreased from 5.1 per cent to 0.71 per cent in the respective period.

The analysis shows that the contribution of Agricultural Income Tax towards the state exchequer was very little and it deteriorated after the introduction of compounding.

**(d) Ratio of Agricultural Income Tax to Agricultural Income**

Now we will analyse the percentage of agricultural income collected as Agricultural Income Tax before and after the 1991 Act. Table 7.7 gives the ratio of Agricultural Income Tax to the adjusted agricultural income of the state.

Table 7.7  
Ratio of Agricultural Income Tax to AAI

Year	Agricultural Income Tax/AAI
1960-61	0.0100
1970-71	0.0050
1980-81	0.0087
1990-91	0.0068
1992-93	0.0023
1999-00	0.0012
2000-01	0.0023

Source: Computed from various issue of RBI Bulletin and Economic Review

Table shows that in 1960-61 Agricultural Income tax came about 10 per cent of the agricultural income and it fell to 0.68 per cent in 1990-91 on the eve of the compounding and it fell further to 0.23 per cent in 2000-01. The fall had taken place even before the introduction of the compounding. But there is further fall in the nineties: Agricultural Income Tax in 2000-01 is only 33.8 per cent ( $0.0023/0.0068 \times 100$ ) of what it was in 1990-91. Thus it is clear that the change in the tax system had not only not improved tax collection but also there is deterioration thereafter.

### ***7.3.3 Responsiveness of Agricultural Income Tax:***

Generally, a tax responds to changes in the tax base, tax rate and other elements of tax effort by the authorities. In this section, we try to see the response of Agricultural Income Tax to different determinants of it. Agricultural income is the tax base of agricultural income tax. In the case of compounding system net area cultivated also can be considered as a tax base.

#### **(a) Adjusted Agricultural Income and Agricultural Income Tax:**

Agricultural income is the base of the Agricultural Income Tax. Let us examine the response of Agricultural Income Tax to changes in agricultural income. Table 7.8 gives the elasticity of Agricultural Income Tax to agricultural income. Elasticity means the responsiveness of Agricultural Income Tax to changes in agricultural income; it explains the percentage of change in Agricultural Income Tax to a percentage change in the agricultural income. Agricultural income is the adjusted agricultural income. The table shows that the responsiveness of Agricultural Income Tax to agricultural income was very little even in 1989-90 and 1990-91 years preceding the introduction of compounding system. They were 0.0068 and 0.0067 respectively. Responsiveness after the introduction of compounding was still lower and decreasing and is only 0.0019 in

1999-2000. Rubber and Coffee cultivation below 20 hectares were given tax holiday from 1999-00 and 2000-01 respectively. There fore a considerable section of the cultivators have gone out of the tax net. Similarly cultivators with less than 5 hectares of land are exempted from Agricultural Income Tax. This also has caused a fall in the number of cultivators in the tax net. Negative elasticity in 2000-01 is due to the fact that there is fall in the adjusted agricultural income in the year and Agricultural Income tax collection increased.

Table 7.8  
Elasticity of AIT to AAI

Years	Elasticity
1989-90	0.0068
1990-91	0.0067
1991-92	0.0023
1995-96	0.0011
1999-00	0.0019
2000-01	-6.0340

Source: Computed from various issues of R.B.I bulletin and Economic Review.

This is the case in respect of average elasticity also in the decades (Table 7.9). 1961-70 had an average elasticity of 0.0071 and in the nineties it declined to a mere 0.0027.

Table 7.9  
Average Elasticity

Years	Average Elasticity
1961-1970	0.00710
1971-1980	0.00699
1981-1990	0.00670
1991-2000	0.00270

Source: Same as Table 7.8

Thus, increase in agricultural income has not led to an equal or proportionate increase in agricultural income tax collection not only in the nineties but also even

before that. But the impact of increase in agricultural income on Agricultural Income Tax was all the more lower in the nineties

### **(b) Agricultural Income Tax and Net Area Cultivated**

Another important variable that could influence agricultural income tax is net area cultivated because tax was assessed on the extent of the area cultivated by a person, i.e., the change in net area cultivated should influence the tax collection. Here we try to establish the relation between cropped area and the tax. Table 7.10 shows the compound growth rate of Agricultural income and net cropped area in the eighties and in the nineties.

Table 7.10  
Compound Growth Rate

Year	Agricultural Income tax	Net cropped Area
1980-1990	4.12	0.24
1991-2001	1.27	-0.48

Source: computed from various issues of R.B.I bulletin, Economic Review and Statistics for Planning 2001.

In the eighties net cropped area increased by 0.24 per cent and agricultural income tax grew by 4.12 per cent. But in the nineties net cropped area showed a negative growth rate but Agricultural Income Tax had grown by 1.27 per cent. So we do not find a uniform relationship between the two. In other words net cropped area does not seem to influence the tax collection even after part of the Agricultural Income Tax started to be collected on the basis of the area of land held by the individuals.

### **Regression Model**

Result of the simple regression analysis given in Table 7.11 shows that  $R^2$  has fallen in the 1990s sharply, signalling the fall in the influence of adjusted

agricultural income on Agricultural Income Tax collection. The  $R^2$  in 1990s was just 0.027438 showing that there is no acceptable relation between the two.

Table 7.12 shows that the influence of agricultural income and net area cropped taken together on Agricultural Income Tax also decreased in the nineties. This is the case with the influence of agricultural income, Net State Domestic Product and net cropped area on Agricultural Income Tax (Table 7.13).

$$Y = \alpha + \beta \ln x,$$

where Y = Agricultural Income Tax and x = AAI.

Table 7.11

Regression model showing the influence of AAI on Agricultural income tax

Years	$\alpha$	$\beta$	$R^2$
1960-61 to 1970-71	158.5246 (6.444184)*	0.002768 (4.649297)	0.801433
1970-71 to 1980-81	-479.3348 (-1.614262)	0.012217 (3.971496)	0.636698
1980-81 to 1990-91	583.6168 (1.397158)	0.004028 (2.269296)	0.363944
1990-91 to 2000-01	2444.315 (3.80838)	-0.000357 (-0.50389)	0.027438

Note: Figures in brackets are t value; \* significant at 5 per cent

$$\ln Y = \alpha + \beta_1 \ln X_1 + \beta_2 \ln X_2$$

Where Y = AIT;  $X_1$  = Agricultural Income;  $X_2$  = Net Cropped Area

Table 7.12

Regression model comparing the influence of AAI and Net cropped area on Agricultural income tax in Eighties and Nineties

Years	$\alpha$	$\beta_1$	$\beta_2$	$R^2$
1980-81 to 1990-91	11015.64 (0.444603)	0.00527 (1.599952)	-0.004863 (-0.421456)	0.418785
1990-91 to 2000-01	75.4288 (0.3551)	-0.16009 (-0.5531)	-4.4881 (-0.3086)	0.051500

Note: (i) We have taken precaution for multicollinearity.

(ii) Figures in brackets are t values

$$\ln Y = \alpha + \beta_1 \ln X_1$$

where Y = Agricultural Income Tax;  $X_1$  = Net Cropped Area

Table 7.13

Regression model comparing the influence of Net cropped area on Agricultural Income Tax in the Eighties and Nineties

Years	$\alpha$	$\beta_1$	$R^2$
1981-82 to 1991-92	-20838.38 (-1.364346)	0.01015 (1.464312)	0.211373
1991-92 to 2000-01	-1811932 (-0.163689)	1.195664 (0.242863)	0.007319

Note: Figures in brackets are t values

The influence of Agricultural Income Tax on State's own tax, Total tax and Total revenue also came down heavily in the nineties. Tables 7.14, 7.15 and 7.16 show that with  $R^2$  0.004694, 0.016117 and 0.007982 there is no acceptable relation between Agricultural Income Tax and State's own tax, Total tax and Total revenue respectively. Decades before 1990s demonstrated better relations between Agricultural Income Tax and the above variables.

Thus, the regression analysis corroborates our finding that performance of Agricultural Income Tax was poor and deteriorated in the 1990s. Therefore, we can say that compounding of agricultural income acted as a catalyst for detaching the relation between agricultural income and Agricultural Income Tax on the one hand and Agricultural Income Tax and other variables of state revenue on the other.

$$\ln Y = \alpha + \beta_1 \ln X_1$$

where  $Y = \text{STX}$ ;  $X_1 = \text{Agricultural Income Tax}$

Table 7.14

Regression model comparing the influence of Agricultural Income Tax on STX in the Eighties and Nineties

Years	$\alpha$	$\beta_1$	$R^2$
1980-81 to 1990-91	13528.5 (0.445435)	41.96543 (2.154872)	0.340344
1990-91 to 2000-01	395724.6 (2.456834)	-14.05088 (-0.194348)	0.004699

Note: Figures in brackets are t values

$$\ln Y = \alpha + \beta_1 \ln X_1$$

where  $Y = \text{TTX}$ ;  $X_1 = \text{Agricultural Income Tax}$

Table 7.15

Regression model comparing the influence of Agricultural Income Tax on TTX in the Eighties and Nineties

Years	$\alpha$	$\beta_1$	$R^2$
1980-81 to 1990-91	2297.33 (0.556513)	54.94968 (2.075821)	0.371876
1990-91 to 2000-01	525739.8 (2.508687)	-35.86621 (-0.38396)	0.016117

Note: Figures in brackets are t values

$$\ln Y = \alpha + \beta_1 \ln X_1$$

where  $Y = TR$ ;  $X_1 = \text{Agricultural Income Tax}$

Table 7.16

Regression model comparing the influence of Agricultural Income Tax on TR in the Eighties and Nineties

Years	$\alpha$	$\beta_1$	$R^2$
1980-81 to 1990-91	31059.55 (0.641129)	71.70588 (2.308327)	0.371876
1990-91 to 2000-01	633810.6 (2.800098)	-25.77657 (-0.253707)	0.007982

Note: Figures in brackets are t values

### (c) Crop Price and Agricultural Income Tax

The productivity of the land together with prices of the crop determines the agricultural income or taxable capacity of the cultivators. So given other things, a rise in price of crops increases the taxable capacity. There is a direct relation between taxable capacity and crop prices. In this section, we try to analyse the existing relation between Agricultural Income Tax and price of crops.

As we know, it is mostly the plantation crops that are subjected to Agricultural Income Tax. But, here, we look into the type of relation that exists between Agricultural Income Tax and not only the prices of plantation crops but also prices of all crops.

Directorate of Economics and Statistics (DES) has constructed price indices of plantation crops and all crops. We use this data for our study. DES also supplies indices/data on the prices received by the farmers. The price data are given for calendar years and tax figures are for financial years<sup>8</sup>. Therefore, we do not try to use these data for working out any measures for comparison.

---

<sup>8</sup>In order to lessen the impropriety in comparison of the data of financial year with that of the calendar year we have taken note of the fact that the calendar year ends with December 31 and financial year ends with March 31. Financial year 1990-91 starts with April 1990 and ends with March 1991. So, it includes figures of nine months of calendar year 1990 and 3 months of 1991. We compare the calendar year 1990 with that of financial year 1990-91 so that nine months are common in both and only three months are not common.

Similarly, price data are indices that take into account various crops' prices. But these indices are capable of shedding light on the general trend of the price behaviour.

Therefore, here we attempt for just a comparison of the trend of price and trend of the Agricultural Income Tax. This will help us to conclude whether prices do influence the tax collection or not.

Table 7.17 summarizes the price data and Agricultural Income Tax collection from 1990 to 2003. Prices data are given for the calendar years and Agricultural Income Tax for financial years.

Table 7.17  
Price Index and Agricultural Income Tax

Year	Price index of Plantation Crops	Price index of All Crops	Index of Prices Received by farmers	AIT	
				Year	(Rs. Lakhs)
1990	909.7	1028.4	1072	1990-91	2394
1991	888.1	1263.1	1326	1991-92	3512
1992	948.1	1377.1	1486	1992-93	1252
1993	1037.9	1549.7	1496	1993-94	2088
1994	1133.7	1491.7	1582	1994-95	1724
1995	1484.6	1702.0	1802	1995-96	2608
1996	1567.5	1922.5	2079	1996-97	1210
1997	1569.8	2144.5	2486	1997-98	2138
1998	1851.4	2063.5	2447	1998-99	2702
1999	1819.1	2690.0	2907	1999-00	1419
2000	1461.0	2412.0	2492	2000-01	2500
2001	1370.0	2077.0	1927	2001-02	NA
2002	1337.0	2151.0	1999	2002-03	NA

Source: Compiled from various issues of Statistics for Planning

The table shows that plantation crop prices were increasing right from 1991 till 1998; all price indices increased consistently from 1991 till 1999. Thereafter, there is a decline. Agricultural Income Tax on the other hand showed a tendency of decrease in 1992-93, 1994-95, 1996-97 and 1998-99. Other years experienced

increase. This shows that Agricultural Income Tax had unstable and zigzag type behaviour.

Increase in the price index on plantation crops from 1991 to 2002 was 50.55 per cent; all crops price index increased by 70.31 per cent, average farm prices received increased by 50.75 per cent over the same period (2002 over 1991). But, Agricultural Income Tax increased only by 4.42 per cent from 1991-92 to 2002-03.

Growth rate of the prices of plantation crops from 1991 to 1999 (the year up to which prices increased) was 104.84 per cent, 63.4 per cent for all crops and 119.24 for average farm prices received, where as Agricultural Income Tax showed a mere 4.42 per cent increase.

The above analysis proves that Agricultural Income Tax had a peculiar trend (determined by exogenous factors), unaffected by prices of the agricultural commodities.

A year-to-year comparison confirms this finding. For example, all indices of farm prices showed an increase in 1992 over the previous year where as Agricultural Income Tax decreased sharply from Rs. 3512/- lakhs in 1991-92 to Rs. 1252/- lakhs in 1992-93. Similarly, price indices of plantation crops and all crops declined from 1998 and 1999 respectively. Agricultural Income Tax on the other hand showed an increase in 1998-99, decline in 1999-00 and increase in the following year. So our study confirms that changes in prices of the agricultural commodities do not influence Agricultural Income Tax

#### **(d) Cost of Cultivation and Agricultural Income Tax**

One of the important factors that affect the taxable capacity of agricultural sector is the cost of cultivation because cost of cultivation influences the net

income of the cultivator. Other things remaining the same, capacity to pay tax falls as cost of production increases. In other words, there is an inverse relation between them. Now, we move on to see the type of relation that exists between cost of cultivation and Agricultural Income Tax.

Directorate of Economics and Statistics has published data on cost of cultivation<sup>9</sup>. Data on cost of cultivation and prices paid by the agriculturists are presented in the following table. Table 7.18 shows that there has been a consistent increase in the cost of cultivation and also prices paid by the farmers. The cost and prices paid by the farmers had more than three fold increase. This means that there is deterioration in the ability to pay Agricultural Income Tax. But despite this we see that there is a slight (1.27 per cent) increase in the Agricultural Income Tax collection. It is also true that Agricultural Income Tax collection behaved in a zigzag manner, increasing in some years and decreasing in some others.

Table 7.18  
Cost of Cultivation

Years	Cost of cultivation	Prices paid by farmers
1990	1728	1277
1991	1910	1435
1992	2255	1646
1993	2579	1834
1994	2891	2057
1995	3312	2331
1996	3928	2666
1997	4571	3007
1998	4895	3212
1999	5556	3532
2000	6173	3816
2001	6584	4048
2002	6684	4122

Source: Compiled from SP 2001 and Economic Review 2003

<sup>9</sup> Directorate of Economics and Statistics, Statistics for Planning 2001 and Economic Review 2003.

Thus, we see that Agricultural Income Tax is not responsive to cost of cultivation and prices paid by the farmers.

### (e) Terms of Trade and Agricultural Income Tax

We have seen that Agricultural Income Tax did not decrease even when cost of production increased, which should be the case under normal condition. But, this need not occur if the earning of the farmers increased more than the increase in cultivation cost leading to an increase in the taxable capacity of the farmers. In this section an attempt is made to see if the earning of the farmers increased or not. For this, we resort to the changes in the terms of trade of the cultivators for the period under study. Terms of trade of the cultivators mean ratio of prices received by the farmers to the prices paid by the farmers. It gives us a picture of the change in the actual earning capacity of the farmers. Table 7.19 presents the parity index of the cultivators.

Table 7.19  
Terms of Trade of the Agricultural Sector

Years	Prices received	Prices Paid	Parity index
1990	1072	1277	84
1991	1326	1435	92
1992	1486	1646	90
1993	1496	1834	82
1994	1582	2057	77
1995	1802	2331	77
1996	2079	2666	78
1997	2486	3007	83
1998	2447	3212	76
1999	2907	3532	82
2000	2492	3836	66
2001	1925	4048	48
2002	1999	4122	49

Source: Compiled from Statistics for Planning 2001 and Economic Review 2003. Base Year: 1952-53

There was a steady fall in the parity index of the farmers till 1996 from 1991. There was an increase in 1997 to 83, then fell to 76 in 1998, increased to 82 in 1999 and decreased continuously there after. Trend of Agricultural Income Tax as

we said earlier did not conform to this behaviour of the terms of trade. It increases in some years and fall in some others. Terms of trade almost halved from 92 in 1991 to 49 in 2002. But Agricultural Income Tax showed a mild increase in the same period.

It should also be borne in mind that parity index was always less than 100 during the period under study meaning that the terms of trade has moved against the farm sector. If the productivity of land does not compensate this fall in terms of trade actual earning of the farm sector is to decline.

#### **7.3.4 Compounding and Cost of Collection**

Since the cost of collection of agricultural taxes in Kerala especially Agricultural Income Tax is discussed in a separate chapter<sup>10</sup>, we limit this discussion only to the administrative cost, which is also called collection cost since the introduction of compounding in Kerala agriculture.

One of the main objectives of new tax system, as specified by the Kaleeswaran Committee was to simplify the assessment procedure so that arbitrariness in assessment eliminated. This would have led to cost reduction as the role of the tax officials in the assessment process would be brought down. But the Act 1991, though provided for the assessment of tax on the basis of the area of cultivation, the role of Agricultural Income Tax officer did not decrease much as he has to be personally satisfied as to the type of crop in a piece of land, change in the crop over the years, land kept idle, area of land with unyielding crops etc. Therefore, Agricultural Income Tax offices had to be maintained not only for employment purposes, as the trade union demand but also for tax collection purposes.

---

<sup>10</sup> Chapter V.

In the following section, we analyse the cost of collection of Agricultural Income Tax after the introduction of compounding in 1991. Agricultural Income Tax is collected by the Agricultural Income Tax and Commercial taxes Department and data on cost of collection incurred by Agricultural Income Tax officials alone is not officially published. Therefore, we had to visit all the Agricultural Income Tax offices in the state with prepaid questionnaire and collect data.

As presented in Chapter VI, before the introduction of compounding cost of collection was comparatively lower ranging between 15.6 per cent and 39.6 per cent of the gross tax collected in each office. Now in recent years, cost as percentage of gross collection has increased much but 6 of the offices still spend less than the revenue collected by them and 6 spending much more than what they collect. Now in 2002-03 the collection cost ranges between 18.62 and 343.4 per cent of the tax collected.

The increase in cost as percentage of gross tax collection is not due to the introduction of compounding alone but due to various other factors. One important factor responsible for this phenomena, which is associated with compounding is the fall in gross collection in each office as a result of exemption granted to persons holding up to 3 hectares of land, from paying Agricultural Income Tax and raising the exemption limit further to 5 hectares.

Another reason is the lack of interest among the officers. Since size of holding is a major determinant of Agricultural Income Tax, the officers do not have much to do with assessment. Arbitrariness is taken away to an extent. Some of the more socially conscious officers confide that agriculturists are poor compared to 'big sharks' among the business community, who easily evade tax. So

'they feel' that there is no meaning in squeezing the hardworking farmers. So collection does not catch up with increase in income and so on.

Another important cause for high cost is the existence of still redundant offices which collect only as little as Rs.254000/- per year and spending Rs. 748000/- on administrative expenses. There is another office, which collects only Rs. 89000/- per year. It is true that many are merged into nearby offices transferring all the files and work. But still there are offices which handle only very few files.

### **7.3.5 Size of Holding and Agricultural Income Tax**

A major aspect of the Agricultural Income Tax Act 1991 is that it exempted people with 3 hectares of land or less from paying this tax and the exemption is extended to 5 hectares through the Budget speech 2000-01 and is implemented through Act 7 of 2001.<sup>11</sup> . This is a change, which has long lasting and important impact on the tax collection in a state like Kerala where land reforms are very successful. As a result of land reforms, high density of population and the prevalence of the nuclear family system, size of holdings in Kerala is very small.

Economic soundness of this decision of exemption is dealt with in the chapter discussing the taxable capacity of the agricultural sector. As we pointed out earlier this decision was against the recommendation of Raj Committee<sup>12</sup> and Kaleeswaran Committee, which wanted exemption to be given to those possessing less than 3 standard hectares of land. The difference between 3 standard hectares and 3 hectares is great<sup>13</sup>.

---

<sup>11</sup> Act 7 of 2001 p.119

<sup>12</sup> *Report of the committee on Taxation of Agricultural Wealth and Income*, Op. Cit., pp.50-51

<sup>13</sup> *Report of the committee for Restructuring Agricultural Income Tax Laws*, Op.Cit., p17.

Now we will analyse the size of holding pattern in Kerala and its probable impact on the tax collection. Table 7.20 summarises the land holding position in Kerala up to 1995-96. It shows that 83.5 per cent of the total operational holdings have a size less than 3 hectares. That means only 16.5 of the total land cultivated in Kerala is under the tax net.

Table 7.20  
Change in the Size and Pattern of Holdings in Kerala

Size of holdings (Hectares)	1985-86	1991	1995-96
Below 3	78.1	79.5	83.50
Between 3 and 20	21.9	20.5	11.64
Above 20	7.67	8.57	4.86
Total	100.00	100.00	100.00

Source: Computed from various Statistics for Planning.

Even this 16.5 per cent are not taxable because, of this 16.5 per cent having a size of more than 3 hectares 2.52 per cent are owned by institutions such as churches, mosques, temples, orphanages etc, which are registered under trusts/charitable organisations, which can avoid tax legally. Therefore only about 14 per cent of the total land operated in Kerala is under the purview of Agricultural Income Tax if the exemption is for 3 hectares or less.

As the exemption limit increases (as provided to rubber in 1999-00 and to coffee in 2000-01 and all farmers possessing up to 5 hectares in 2000-01) tax net shrinks and the Agricultural Income Tax collection is bound to decline.

Family survey conducted in 1308 house holds shows (Table 7.21) that more than 89 per cent of the families have size of holding less than 5 acres and 8.95 per cent have a size of holding between 5 acres and 10 acres. Only 1.90 per cent of the holdings are of 10 acres or more in size. This is a very important finding in the context of exemption being given to land less than 5 hectares of size from

Agricultural Income Tax. In that case there will be only a very few assesseees of Agricultural Income Tax in the state.

Table 7.21  
Size of Holdings of the Sample Families

Size of land	No. of Holdings	% of the total
Less than 50 cents	469	35.86
Between 50 and 300 cents	552	42.20
Between 300 and 500 cents	145	11.09
Between 500 and 1000 cents	117	8.95
1000 cents and above	25	1.90
Total	1308	100.00

Source: Household Survey

### 7.3.6 Number of Tax Payers and Assesseees

When we evaluated the performance of Agricultural Income Tax offices, it was clear that there is a sharp decrease in the number of tax payers (Table 6.4) and assesseees (Table 6.5) in the nineties. This is quite natural because cultivators having 3 hectors (subsequently increased to 5 hectors) were exempted from Agricultural Income Tax by the Act 1991.

### 7.3.7 Compounding and Partition of Land

Survey also tried to extract information on the number of partitions in the state in the last 10 years from 1993 to verify the allegation that farmers are resorting to artificial partitions of land to evade tax since Agricultural Income Tax is levied only on those who have land above 3 hectares in 1991 and 5 hectares since 2001. But the study showed that there were only 42 cases of partitions in the entire 642 agricultural families in the last 10 years, and only 20 cases of partitions in which more than two acres of land was handed over. In non- agricultural families there were only 29 cases of partition, of these there are only 7 cases of partition involving more than 2 acres of land. Thus, number of partition of land

involving more than two hectares of land were 27 and total number of partitions were 71 in the last 10 years in 1308 families. From this it may be concluded that artificial partitions are not many in Kerala to escape from the Agricultural Income Tax.

#### **7.4 Conclusion**

The introduction of compounding in 1991 and the changes there after to the Agricultural Income Tax laws have not improved tax collection: but by reducing the arbitrary powers enjoyed by the tax officials, harassment of farmers came down considerably. The analysis shows that revenue collection through agricultural income tax as percentage of total revenue, total tax revenue, state's own tax revenue, own revenue etc. have decreased in the 1990s. There is only a mild rate of growth (1.27 per cent) of the revenue collection.

One important aspect of agricultural income taxation is that it is not responsive either to agricultural income, net area cropped, prices received by the farmers, cost of cultivation, deterioration in the terms of trade etc. Increase in the per-cultivator tax collection is chiefly due to the fall in the number of cultivators in Kerala. There is no sound economic reason for the exemption given to the farmers having land holding up to 3 hectares irrespective of the type of crop cultivated. This must have resulted in the lack of buoyancy in tax collection in a state like Kerala where land reforms have been very successful and 83 per cent of the area of holding is in the category of less than 3 hectares. The study also unveils the fact that there isn't any attempt by the farmers to resort to fake partition of land among the members of the family to evade Agricultural Income Tax.

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## **CHAPTER VIII SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS**

Taxes are not only the major sources of revenue for the governments but also effective instruments of social and economic change. There fore a good tax system is essential in every modern society. Every sector should contribute to the state exchequer according to its ability. Agricultural sector is no exception.

But taxation of agricultural sector is a delicate issue in Kerala. This is so in spite of the fact that agriculture is a prominent sector contributing about 17.2 per cent of the Net Domestic Product. Agricultural sector still employs a large section of the work force in the state. Cropping pattern has changed a lot; food crops largely giving way for cash crops signifying large-scale commercialisation of the sector. Successive governments have spent a lot of money on agriculture through five-year plans. State government is passing through a very difficult, crisis like financial situation; the very existence of Kerala model of development is being threatened by resource crunch.

An impartial study on agricultural taxation in Kerala, stressing on the tax performance of the agricultural sector; measuring the tax burden borne by the sector; and assessing the taxable capacity is essential before taking a decision stand on the taxation of agricultural sector in the state. There fore this study was under taken with the specific objectives of

- (i) analysing the revenue structure of the State Government of Kerala,
- (ii) examining the performance of the agricultural taxation in Kerala and to compare it with other states,

- (iii) assessing the existing tax burden of the agricultural sector and to measure the taxable capacity of the sector,
- (iv) examining the cost of collection of agricultural taxes and efficiency in tax collection, and
- (v) analysing the impact of the introduction of compounding on agricultural income tax.,

Secondary and primary data were used to conduct the study. Appropriate tools were used to analyse and interpret the data. There are very strong arguments for the increased taxing of agricultural sector in India. Similarly, there are very strong opponents of increased taxation of agricultural sector. Second chapter looks in to them and also reviews some of the important related/similar studies at the national level, states' level and in Kerala.

## **8.2 Major Findings of the Study**

Each objective was taken up and analysed in a separate chapter. There fore third chapter dealt with the structure of revenue of the state government and had the following findings:

- (1) Revenue structure showed that share of taxes in total revenue increased and shares of non-tax revenue declined significantly between 1957-58 and 2000-01.
- (2) Share of state's own tax in the total revenue increased, share of central taxes has a marginal increase, share of state's non-tax revenue fell sharply so also the share of central non-tax revenue. Share of Agricultural taxes in Total revenue decreased.

- (3) Relative share of state and centre remained almost same 74.5:25.47 and 74.35: 24.15 in 1957-58 and 2000-01 respectively.
- (4) Share of state's own tax revenue in total tax revenue increased considerably and share of central taxes in Total Tax declined. State's own revenue constituted about 90.49 per cent of own revenue in 2001. Thus, it is clear that Total Tax, own revenue and State's Own Tax dominated total revenue of the state and their share increased.
- (5) Total tax and state's own tax had highest positive income elasticity on the years of National Emergency.
- (6) Kerala's tax performance is one among the best in Indian states. Kerala's revenue mobilization is always above all states' averages.
- (7) But, Kerala's share of central resources (tax and non-tax) is below the all states' averages.
- (8) Sales tax constitute about 74.01 per cent of the state's own tax revenue in 2000-01. Sales tax always held dominant position followed by excise duty, other important taxes are motor vehicles tax, stamp duty and registration fee.

Fourth chapter analysed the performance of the direct taxes of the Agricultural sector in the state. There are only two direct agricultural taxes. They are land revenue and agricultural income tax. Each of them was separately analysed and also studied by taking them together under the name Agricultural taxes (AGT). Major findings are given below:

- (1) Agricultural Income Tax has a declining growth rate. Share of Agricultural Income Tax in Total Revenue, Total Tax, State's Own

Tax, Own revenue etc. came down. Income elasticity was negative in recent years and importance of agricultural income in determining the Agricultural Income Tax is declining.

- (2) Land revenue showed increasing growth rate. Per hectare and per holding land revenue increased. Land revenue as percentage of adjusted agricultural income declined. So is the share of land revenue to Total Revenue, Total Tax, State's Own Tax and Own revenue.
- (3) Direct taxes of agricultural sector together had an average growth rate of 7.98 per cent between 1961 and 2001. Per cultivator Agricultural Taxes increased. But ratio of per cultivator Agricultural taxes to per cultivator income decreased. Share of Agricultural Income Tax, Land revenue and in short, Agricultural Taxes declined in state's own tax revenue. Share of direct agricultural taxes in Total Tax fell sharply. Share of Agricultural taxes in Own Revenue also decreased.
- (4) Resource mobilization from the agricultural sector through direct taxes was decreasing comparatively.
- (5) Direct taxes of agricultural sector had negative income elasticity during the years of emergency. This can be due to the less harassment of small farmers during Emergency.
- (6) Kerala's dependence on agricultural sector for revenue, though negligent is the highest among the south Indian states and only second to Assam among the major Indian states.

Third objective of assessing the taxable capacity and measuring the tax burden of the agricultural sector was done in the fifth chapter. Taxable capacity was assessed by computing the net income of the cultivators of a few major crops

in the state. Taxable capacity was assessed also by conducting a family survey and constructing a composite capacity index reflecting the consumer articles possessed, asset position of the family, expenditure on telephone, electricity etc. Tax income ratio was worked out to measure the tax burden. There was a comparison of the tax income ratio of different cultivators to assess the intra-sectoral equity/ inequality in taxation. Tax income ratio of different cultivators was compared with that of a few salaried people of different income groups to compare the inter- sectoral tax burden. The study has the following results:

- (1) At the existing tax laws tax income ratio of the rubber cultivator ranged between 0.0026 and 0.0036. If the area of holding is two hectares, net income of a rubber cultivator is Rs. 77823.6/- per year if price is Rs. 33.94/- per kg. If area of holding is more than two hectares and price of rubber is high net income would be larger and can be considered as under taxed.
- (2) Tax income ratio of a coconut cultivator is between 0.0078 and 0.0099. Net income of a coconut cultivator having two hectares of land is Rs.25737/-. This is his annual family income if the price of coconut is only Rs.3.66/- per nut. Unless the size of holding and prices are very high, scope for further increase in tax on coconut should be ruled out.
- (3) Tax income ratio of a tea estate owner is between 0.0015 and 0.0018 and a tea cultivator is between 0.0013 and 0.0014. If the price of tea is Rs.50.25/- per kg, net returns from two hectares of tea garden would be Rs.132464.00/- and Rs.142520/- for estate owner and cultivator respectively. This shows that as size of holding increases untapped tax potential also increases at the existing level of tax.

- (4) Tax income ratio of coffee cultivator is 0.004 and the net income of a cultivator having two hectares would be Rs 49932.42/- at price Rs.45.53/- per kg. So if area of holding is not large enough and price is not reasonable it will be difficult to collect more tax from the coffee cultivator.
- (5) Tax income ratio of a cardamom cultivator ranges between 0.00069 and 0.0016 at the price of Rs.400/- per kg. Net income of the cardamom cultivator having two hectares of holding is Rs.173200.00/- in the third year of cultivation and increases to Rs.288000.00/ and then declines to Rs.120000/- in the 10<sup>th</sup> year of cultivation. There is definitely untaxed potential here.
- (6) Tax income ratio of a cashew cultivator is 0.008 and his net income from two hectares of cultivation is Rs.24849.44/-. Unless size of holding and prices rise considerably cashew cultivator cannot be taxed more.
- (7) Tax income ratio of a pepper cultivator is 0.018 and his net income from two hectares of cultivation at price Rs.73.78/- per kg would be Rs.11410/-. Unless the area of holding is huge and prices very high there is no scope for further taxation of pepper cultivator.
- (8) There is huge inequality among different cultivators of different crops in paying tax. Cashew cultivator is paying 44 per cent of the tax paid by pepper cultivator who pays the highest tax. Coconut cultivator is paying 43.3 per cent of the pepper cultivator. Coffee cultivator pays 22 per cent of what pepper cultivator pays, rubber cultivator pays 18 per cent of the pepper cultivator, tea estates pay 10 per cent of pepper cultivator and tea cultivator pays 7 per cent and cardamom cultivator

pays just 2.7 per cent of what pepper cultivator pays. So there are some among the agriculturists, who can pay more direct taxes.

- (9) Capacity index constructed for 473 families (195 agricultural, 122 both spouses employed, 152 single spouse employed) showed that:
- (a) Of the ten top families, one was an agricultural one
  - (b) Of the next ten top families, there was one agricultural family.
  - (c) Of the next ten top families, three were agricultural families. So this showed that out of the 30 top families, 5 were agricultural.
  - (d) Of the top 10 per cent of the 473 families 9 were agricultural families.
  - (e) Of the top 20 per cent of the 473 families, 19 were agricultural.

This means that 2.9 per cent of the agricultural families (642) belong to the top 20 per cent of the whole (1308) families.

- (10) These agricultural families must have annual income ranging from Rs.150000/- to above Rs.200000/-. These families were paying only nominal direct taxes, that is, about 6.6 per cent of what a salaried household pay as tax.
- (11) It was also seen that only a very minor portion of the total agricultural families belong to this category, out of the 642 families surveyed only 19, i.e., about 2.9 per cent of the agricultural families belong to the top category of the society. This came about 1.5 per cent of the total population (1308).

- (12) This is corroborated by the size of holding of the families. 98.1 per cent of the sample had less than 4 hectares of land. More than 89 per cent had less than 2 hectares of land. Secondary data also showed that 83.5 per cent of the holdings were of the size less than 3 hectares.
- (13) Therefore, the lack of buoyancy in tax collection from agricultural sector was due to the existence of large number of small and marginal farmers in the state and tax exemption given to 3 hectares of holding (and then raising it to 5 hectares irrespective of the crop cultivated) exempted even richer sections of the agricultural sector from paying Agricultural Income Tax. That was why even when prices of agricultural products increased in the mid nineties (till 1998-99) agricultural income tax collection was not increasing correspondingly. The fall in the prices since then added fuel to the fire.

Analysis of the cost of collection of tax and assessment of the functioning of the tax offices were done in chapter six and had the following conclusions:

- (1) Administrative cost of land revenue is not identifiable as the village offices, which have a lot of other functions, are collecting it. The extra cost incurred for the collection of land revenue is negligible. Compliance cost, efficiency cost and social cost also are bound to be low for land revenue.
- (2) Administrative cost of Agricultural Income Tax is very high. Many of the offices are not viable in the sense that their cost of collection is more than what they collect as tax. Even those offices whose revenue is more than cost, on the average are incurring 76.94 per cent of their revenue as cost. If total revenue of Agricultural Income Tax offices alone is taken, excluding that of the Assistant Commissioner's offices,

total revenue is less than total cost i.e., revenue on the average is only 82.97 per cent of the cost. If all the offices are considered they spend 72.34 per cent of the revenue as cost of collection.

- (3) In the early 1990s, the cost ranged between 15.6 and 39.6 per cent of the revenue.
- (4) Of the total administrative cost, 98.06 per cent were on wages and salaries. Modern technology is not made use of in tax collection.
- (5) Total arrears of Agricultural Income Tax was on the increase; 13.29 per cent of arrear collection was stayed by court; 0.94 by the government; and 9.73 per cent by the officials. 68.62 per cent are in the stage of revenue recovery. This was the case of offices, which handled the tax returns of the individual cultivators.
- (6) Arrears of large companies and firms (who were very few in number) were more than the individual cultivators who were very large in number. Of these, 27.47 per cent were stayed by court, 31.49 per cent by tax officials and tribunals. This shows that these assesseees have the wherewithal for getting a stay. 45.12 per cent of the arrears here were at the stage of revenue recovery.

Analysis of the impact of the introduction of compounding and subsequent changes were made in Chapter VII and arrived at the following conclusions:

- (1) The Agricultural Income Tax act 1991, which introduced the compounding of agricultural income for tax purpose had many provisions which were opposed to the recommendations of the Committee on Taxation of Agricultural Wealth and Income, 1972 (Raj

committee) and the Committee for Restructuring Agricultural Income Tax laws, 1988 (Kaleeswaran committee).

- (2) The introduction of compounding had affected the agricultural income tax collection; growth rate fell considerably in the nineties. Share of Agricultural Income Tax in Total Revenue, Total Tax, State's Own Tax and Own revenue fell sharply to  $\frac{1}{2}$  (half) of what it was before the introduction of compounding.
- (3) The cost of collection of Agricultural Income Tax had manifold increase in relation to the tax collected in the nineties and many offices are not economically viable.
- (4) Agricultural Income Tax became less income elastic in the nineties. There is no one to one relation between Agricultural Income Tax and net cropped area.
- (5) Agricultural Income Tax was not influenced by price trends in the nineties.
- (6) Agricultural Income Tax was not affected by changes in cost of cultivation.
- (7) Agricultural Income Tax was not affected by deterioration in terms of trade of the agricultural commodities.
- (8) Farmers are not resorting to fake partitions to evade Agricultural Income Tax.
- (9) The Act had definitely reduced the harassment of farmers by the tax officials.

### 8.3 Policy Implications

The findings of the study has the following implications:

- (1) Fall in the share of non-tax revenue (both central Aid and state's own non tax revenue) in the total revenue calls for concentrated attempt at this front.
- (2) The fact that the contribution of the Central share of revenue to the state is less than the all states average, calls for increasing the effort for getting the due share from the Centre either by presenting the case more effectively before the Finance Commission, Planning Commission or by political pressure at the ministerial level.
- (3) The sharp fall in the contribution of the direct taxes of the agricultural sector in spite of the commercialisation and growth of the sector should induce the planners and policy makers to find out methods to tax the untapped tax potential of the rich agriculturists while leaving the marginal and small farmers, who are the vast majority, unaffected.
- (4) The intra-sectoral and inter-sectoral in equality in tax also calls for this. Care should be taken to leave the small and marginal farmers from further increases in tax burden as they are already paying their due share. There should be graded tax rates as acreage of land holding increases.
- (5) Agricultural Income tax has a huge collection cost. Many of the offices are not economically viable in the sense that administrative cost is greater than the revenue collection. That is, there exist many redundant offices.

- (6) Offices handling the tax returns of the agricultural firms and companies have relatively less collection cost in relation to the revenue collected.
- (7) The intervention of courts and stay given by them do affect the agricultural income tax collection.
- (8) Direct Government intervention is negligible; but the interventions of tribunals, higher officials like Deputy Commissioner, Assistant Commissioner of Tax also affect Agricultural Income tax collection.
- (9) Modern technology is not used in the tax collection as more than 98 per cent of the expenditure is on wage bill of the administrative staff.
- (10) The introduction of Compounding has not only did not improve Agricultural Income Tax collection but also was damaging it. But it has reduced harassment of the farmers; it has also reduced the enthusiasm of the tax officials in Agricultural Income Tax collection.
- (11) Direct taxes on agriculture do not seem to be responsive to agricultural income, cost and prices paid by the farmers, deterioration in the terms of trade of the farmers and change in the net cropped area of the farmers. So a better effort on the part of the tax officials can fetch larger revenue.

#### **8.4 Suggestions**

- (i) In order to attain buoyancy in tax collection from agricultural sector, tax policy should concentrate more on the richer sections of the sector. This is because a very large section of the sector is composed of small and marginal farmers. The net annual income of a pepper cultivator who has two hectares of land is Rs.11410/-. This is the family income and he is

paying 1.8 per cent of his income as tax and what more can be expected from him. But, the net income of a cardamom cultivator who has one hectare of holding is Rs.144000/- per year (when the plant matures) and is paying 0.00069 per cent of income as tax. He has excess ability to pay tax. Therefore, tax policy should focus on such affluent sections. This is essential in reducing inequality not only in tax but also in income.

Agricultural Income Tax as it exists now is incapable of obtaining this result. It has led to huge cost of collection. Therefore, it should be done away with for land holding less than 20 hectares. Let there be one officer attached to the Department of Commercial and Agricultural Income taxes to deal with the arrear files in each district. Let the Assistant Commissioners at Kozhikode and Ernakulam continue with the returns of companies and firms. The exemption and deductions given to them should be rationalized. Officers confide that companies are permitted to show any amount as cost of cultivation. Some spent Rs.600,000/- for harvesting a crop, which yielded only Rs.400,000/- as returns. Such absurd accounts should be out rightly rejected. It should be made mandatory for certain crops to show positive results if prices are reasonable. Depreciation allowed to luxury vehicles of the owners is unnecessary and this leads to tax evasion. The administrative system should be vibrant to respond to price fluctuations. Offices should be computerised and explanation be asked if a tax payee among the companies is not paying the tax in one year and tax official should get satisfied on the reasons. There should be periodic evaluation of the offices by higher officers. This would not lead to harassment as companies and firms have their resources to withstand it.

For holdings below 20 hectares a rationalised land revenue system be introduced. Families having less than two hectares of land cultivating crops other than tea, cardamom and rubber should have the present rate of land tax. Holdings above two hectares must have progressive but moderate rates of land revenue. There are about 104773 holdings with a land size between two and five hectares of land. They hold about 2,84990 hectares of land. There are 8880 land holdings between the size group of 5 and 10 hectares holding about 57,649 hectares of land. There are 2187 land holdings between 10 and 20 hectares holding about 27358 hectares of land. These land holdings could be progressively taxed, considering also the crop cultivated. Together with this, plantations like rubber, cardamom and tea between five and 20 hectares should have a plantation tax, as was the practice before 1991. This will definitely fetch higher revenue for the state exchequer with out much burden to cultivators and with out increasing the administrative cost considerably. The taluk offices, where there should be one officer responsible to collect only land revenue, could collect this. Tax arrear should fetch penal interest.

- (ii) There should be more research on the compliance cost, efficiency cost and social cost of Agricultural Income Tax in the state.
- (iii) A very important defect of the agricultural system in Kerala is that, though there are different agencies like Rubber Board, Spices Board, Directorate of Extension at the Kerala Agricultural University, no one conducts realistic study on the cost of cultivation of different crops in the state. There fore, either these agencies should systematically conduct study on the cost of cultivation and productivity of different crops or there should be a separate agency for this. This is very

essential not only for formulating tax policy but also to assess the credit requirements, indebtedness of the farmers and economic viability of cultivation of each crop.

- (iv) There has not been any serious attempt at analysing the tax potential of the agriculturists in recent times. The last attempt at All India level was the Committee on Taxation of Agricultural Wealth and Income in 1972 (Raj Committee), and at the state level it was the Committee for Restructuring Agricultural Income Tax Laws in 1988. So there should be a new attempt at analysing the tax potential of the agricultural sector in the state and at the national level.

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## SELECT BIBLIOGRAPHY

- Allen, Charles M. (1971) *The Theory of Taxation*. Penguin: Modern Economics Texts.
- Angrish, A.C. (1972) *Direct Taxation of Agriculture in India*. New Delhi: Somaliya Publicatons Private Ltd.
- Arneja J. S. (1987) *Agricultural Taxation in Punjab*. Jalandhar: A.B.S.Publication,
- Bhargava, P.K. (1976) *Taxation of Agriculture in India*. Bombay-2: Vora &co. Publishers Pvt. Ltd.
- Bird, Richard M. (1974) *Taxing Agricultural land in Developing countries*. Cambridge, Mass: Harvr Uni. Press.
- Bird, Richard M. (1991) "Tax Administration and Tax Reforms: Reflections on Experience" *In Tax Policy in Developing Countries*, Edited by Javad Khalilzadesh-Shirrazi Anwar Shals, A World Bank Symposium, Washington D.C.: The World Bank.
- Bird, Richard,M. (1970) *Taxation and Development: lessons from Columbian Experience*. Cambridge: Harvard University Press.
- Chaterjee,Biswadeb. (1997) *Tax performance in Indian States-Acomparative Study*. New Delhi: Mittal Publications.
- Clark, Colin. (1954) *Economic Journal*, ( December 1945) and in his book 'Welfare and Taxation'. Oxford: Catholic Social Guild.
- Dalton, H. (1978) *Principles of Public Finance*. New Delhi: Allied Publishers Pvt.Ltd.
- Dalton, Hugh. (1954) *Wealth and Taxable Capacity*. New Delhi: Allied Publishers Pvt. Ltd.
- Dwivedi, D.N. (1973) *Problems and Prospects of Agricultural Taxation in Utterprdesh*. Delhi: Peoples Publishing House.
- Eckstein, Otto. (1987) *Public Finance*. New Delhi: Prentice Hall of India Pvt.Ltd.
- Frank, Richard W. and Chasin, Barbara H.(1999) "Is the Kerala model Sustainable"? Lessons from the Past: Prospects to the Future", in *Kerala's Development Experience*, edited by M A Oommen Vol.1, New Delhi: Concept publishing company.
- Gandhi, Ved P (1966). *Tax Burden on Indian Agriculture*. Cambridge (Mass): Harvard Law School.

- George, K.K. (1999) *Limits to Kerala model of Development*. Thiruvananthapuram: C.D.S.
- Gillis, Malcolm. In Richard M. Bird (1991) Ed. *More Taxing than Taxes: Implicit Taxation in Developing Countries*, San Francisco: Institute for Contemporary Studies.
- Gopalakrishnan P.K. (1984) *The state of Kerala Finance –Asynoptic View*. Trivandrum: K.P.C.C on Economic Affairs.
- Government of India (1955) *Report of the Taxation Enquiry Commission 1953-54*. John Matthai, Chairman. Delhi: Government of India Manager of Publications, 1955.
- Government of India (1971) *Direct Taxes Enquiry Committee-Final Report*. Delhi: Government of India, Manager of Publications.
- Government of India (1972) *Report of the Committee on Taxation of Agricultural Wealth and Income*. K.N.Raj, Chairman. New Delhi: Government of India, October.
- Government of India (1992) *Report of the Tax Reforms Committee*. Raja J. Chelliah, Chairman. New Delhi: Government of India.
- Government of Kerala (1959) *Report of the Expert Committee on Agricultural Income –Tax and Sales Tax Travancore –Cochin, 1956*, G.Parameswaran Pillai, Chairman. Trivandrum: Govt. Press
- Government of Kerala (1961) *The Kerala Plantations (Additional Tax Rules, 1960) as on 8<sup>th</sup> November 1960*. Thiruvananthapuram: Government Press.
- Government of Kerala (1969) *Report of the Taxation Enquiry Committee 1969*. M.J.K.Thavaraj, Chairman. Trivandrum: Govt. press.
- Government of Kerala (1988) *Report of the Committee for Restructuring Agricultural Income Tax Laws*. N.Kaleeswaran, Chairman. Trivandrum: Government Press, Feb.
- Government of Kerala (2001) *White Paper on State Finances*. Thiruvananthapuram: Govt. Press.
- Government of Kerala (2003) *Explanatory Memorandum on the budget for 2002-2003*. Thiruvananthapuram: Government Press.
- Gulati, I.S (1960). *Resource Prospects of Third Five-Year Plan*. Delhi: Orient Longman.
- Gupta, Janak Raj. (1983) *Burden of Tax in Punjab-An inter sectoral and inter-class analysis*. New Delhi: Naurang Rai, Concept Publishing Company.
- Jain, Anilkumar. (1975) *Taxation of income in India –An Emperical Study since 1939*. New Delhi: The Macmillan Company of India Ltd.

- Jain, P.C. (1974) *Agricultural Taxation in Haryana*. Haryana: Kurukshetra University Press.
- Jeromi, P.D. (2003) "What Ails Kerala Economy? A Sectoral Exploration", *Economic Development in India*, Academic Foundation, New Delhi: Series Editors Raj kapila and Uma Kapila.
- Jonathan, Skinner. (1991) "Prospects for Agricultural Land Taxation in Developing countries". In *Tax policy in Developing Countries*, edited by Javad Khalilzadesh-shirazi Anwar shah, A World Bank Symposium, Washington ,D.C: The World Bank.
- Joshi, T.M, Anjanaiah, N. and Bhende, S.V. (1968) *Studies in the Taxation of Agricultural Land and Income in India*. Bombay: Asia Publishing House.
- Khusro, A.M (1967) "Should land revenue be abolished?" *Economic Times*, (June 16 and 17.
- Khusro, A.M (1963) "Taxation and agricultural land" *Economic Weekly*, February.
- Krishna, Raj (1972) "Intersectoral Equity and Agricultural Taxation in India" *Economic and Political Weekly*, 7, special number.
- Krishnan, T.N.(1972) *Taxation of Property and Net Wealth in India: A note*. Thiruvananthapuram: Centre for Development Studies.
- Lakdawala, D. T (1956). *Taxation and Plan*. Bombay: Popular Prakashan.
- Lakdawala, D.T.(1975) "Direct Taxation of Agriculture", *Indian Journal of Agricultural Economics*, 30(4) (October-December)
- Lindaur, John And Singh, Sarjit.(1979) *Land Taxation in Indian Economic Development*. New Delhi: Kalyani Publishers.
- Mathew, E.T. (1968) *Agricultural Taxation and Economic Development in India*. Bombay: Asia Publishing House.
- Mathew, E.T. and Pillai, V.R. (1969) *Burden of taxation in Kerala-A Comparative Study of the Burden of Taxation of the Agricultura land non-agricultural sectors of Kerala 1967-1968*. Govt. of India: Research Programme Committee, Planning Commission.
- Musgrave, Richard A. and Musgrave, Peggy B. (1989) *Public Finance in Theory and Practice*. New Delhi: McGraw-Hill International Editions.
- Musgrave, Richard A. (1959) *The Theory of Public Finance*. New York: McGraw-Hill, Student Edition.
- NABARD (2002) Unit Cost for Approved Investments in Agriculture and allied activities 2001-02. Trivandrum:
- Patel, Arun S. and Pathek, Mahesh T. (1968) *Agricultural Taxation in Gujarat*. Bombay: Asia Publishing House.

- Pathak, Mahesh and Patel, Arun S. (1968) *Agricultural Taxation in Gujarat*. Bombay: Asia publishing house.
- Please, Stanley (1968) "Aspects of Agricultural tax policy in India and Pakistan" (November, Mimeo).
- Prasad, Ramayan. (1987) *Agricultural Taxation and Economic Development*. New Delhi: Deep and Deep Publications.
- Prest, A R. (1974) *Public Finance in Theory and Practice*, Vth Edition, English Language Book Society and Weidenfield and Nicolson.
- Raj, K.N. (1959) "Resources for the Third Plan-An Approach", *Economic Weekly*, January.
- Raj, K.N.(1973) *Direct Taxation of Agriculture*. Trivandrum: Centre for Development Studies.
- Ramachandran, V.K. (1997) "On Kerala's Development Achievements" in *Indian Development Selected Regional Perspective*, edited by Jean Dre'ze and Amartya Sen. New York: Oxford University Press.
- Rao, Hanumantha C.H (1966). *Taxation of Agricultural Land in Andhrapradesh'*, Bombay: Asia Publishing House.
- Rao, Hanumantha C.H. (1983) "Equity demands mopping up surpluses" *Yojana* 26 (24), (January, p.1-15).
- Rao, V.K.R.V. (1983) "The imposition will be a will of the wisp" *Yojana* 26 (24), (January).
- Reddy, K.N. (1972) *Tax Burden on Agriculture in India –An Inquiry in to the feasibility of Agricultural Income Tax*. Baroda: Good companies Publishers.
- Sandford, C.T. (1973) *Hidden Costs of Taxation*. London: Institute for Fiscal Studies.
- Sebastian, Jose. (2002) *Essays on Commodity Taxation*. New Delhi: Common Wealth Publishers, 4831/24, Prahlad Street.
- Sen, A.K and Dre'ze, Jean (2002) *Indian development and participation*. New York: Oxford University Press.
- Sharma, Ram Sharan (1970). *Land Revenue In India-Historical Studies*. Delhi: Motilal Banarsidas.
- Slemrod, J. and Sorum, N. (1984) "The Compliance Cost of the US Individual Income Tax System", *National Tax Journal*, Vol.37, No.4.
- Smith, Adam. (1910) *The Wealth of Nations*, Book V, Chaper II, Part II, New York: Dulton.

- Sommerfeld, Ray M.; Anderson, Hershel M; Brock, Horace R. (1972) *An Introduction to Taxation*. New York: Harcount Brace Jovanovich, Inc.
- Srivastava, S.C. (1970) *Taxation of Agriculture*. Bombay-2: Vora &co. Publishers Pvt. Ltd.
- Sury M.M. (1997) *Indian Tax System*. Delhi: Indian Tax Institute.
- Taylor, Philip E. (1961) *The Economics of Public Finance*. New Delhi: Oxford & IBH Publishing Co.
- Thimmaiah,G. (1979) *Revenue Potential and Revenue Efforts of Southern States*. (A study sponsored by the Planning Commission), New Delhi:Oxford and I B H Publishing Company.
- Thomas, K.T. (1998) President, Central Travancore Agricultural Association, "Karshaka Peedhanathinu Oru Niyamam" (Malayalam), Deepika, (August 11, p.6, Book 112, No.219).

**Agricultural Taxation in Kerala:  
A Study of the Performance and Cost Effectiveness**

*By*

**Johnson Thomas**

*Thesis Submitted to the University of Calicut  
for the Award of the Degree of*

**Doctor of Philosophy in Economics**

**Department of Economics, University of Calicut  
Dr. John Matthai Centre  
Aranattukara, Thrissur - 680 618**

**November 2004**

## Appendix I: FAMILY SURVEY

I.

(a) Name of the head of the family :

(b) Name of the informant / student :

(c) Taluk and District :

(d) Religion :

(e) Details of the family

Family members	Age	Education	Occupation
Father			
Mother			
Grandfather			
Grandmother			
Children			

If children are students, specify the course, year of study, medium, syllabus etc.

Sl. No.	Sex	Age	Course	Year of study	Medium (Mal./Eng.)	Syllabus
1						
2						
3						
4						
5						

(f) Whether grandparents are staying with your family:

(g) Approximate annual family income: Rs.

(h) Approximate annual cost of education of the children: Rs.

II

(a) Area of land owned:

(b) Dry land area  Wet land area

(c) Inherited area  Purchased area

(d) Type of crops grown and approximate area for each

Crops		Area
1	Rubber	
2	Coconut	
3	Areacnut	
4	Pepper	
5	Coffee	
6	Plantain	

Crops		Area
7	Paddy	
8	Tea	
9	Cardamom	
10	Ginger	
11	Cocoa	
12	Any other	

(e) Did your family purchase any land in the last 10 years.

If yes, Year  Area  Price

(f) Did your family sell any land in the last 10 years

If yes, Year  Area  Price

(g) Purpose of selling the land:

(i) Was there any partition of the land in the last 10 years:

Yes  No

(h) Present price of land per unit in your locality: Rs.

(i) Whether there was any shifting of crops during the last 10 years:

Yes  No

If Yes, give details.

(j) Why there was shifting

(l) Any loan  Yes  No Amount  Source  Purpose

## III

## (a) Consumer articles owned

Consumer Articles		✓	Consumer Articles		✓
1	T.V		11	Cooking gas	
2	Fridge		12	Soda maker	
3	Stereo		13	Mixy	
4	Phone		14	Juice maker	
5	Mobile phone		15	Grinder	
6	Computer		16	Vacuum cleaner	
7	Malayalam Newspaper		17	Water purifier	
8	English Newspaper		18	Washing machine	
9	Rubber roller		19	Pressure cooker	
10	Water heater		20	Foam bed	
	Any other				

(b) Gold ornaments owned  Sovereigns

(c) Vehicles owned:

(d) Size and area of the house  Sq. feet

(e) Telephone Bill:

(f) Current Bill

## IV

(a) Distance from the house to the nearby road  Feet/Km.(b) Distance from the house to Tar road  Feet/Km.(c) Distance from the house to Bus route  Feet/Km.(d) Distance from the house to Nearest high school  Feet/Km.(e) Distance from the house to College  Feet/Km.(f) Distance from the house to Hospital  Feet/Km.(g) Distance from the house to Medical college  Feet/Km.

## V. Taxes paid annually

- (a) Land tax
- (b) Profession tax
- (c) Income tax
- (d) Agricultural income tax
- (e) Building tax
- (f) House tax
- (g) Any other

Do the parents like their children to become agriculturists?  
Why?

 Yes No

- Whether it is profitable?
- Falling size of land prevents viable operation
- Labour shortage problems

\*\*\*

**Appendix-II: Questionnaire**

Name of the Institution: Agricultural Income Tax Office . . . . .

Jurisdictional Area:

Year	No. of Assesseees	No. of Tax Payers	Tax Collected
1989-90			
1990-91			
1991-92			
1992-93			
1993-94			
1994-95			
1995-96			
1996-97			
1997-98			
1998-99			
1999-00			
2000-01			
2001-02			
2002-03			

Tax Arrear as on . . . . .	
Various Stages of Action	Rs.
Stay by Government	
Stay by Court	
Stay by Others	
Revenue Recovery	
Other Action	

Particulars of Cost of Tax Collection	Rs. as on . . . . .
1. Whether rented building/Monthly rent	
2. Stationery charges including postage	
3. Whether possessing vehicles/type of vehicles/ cost of fuel charges and maintenance	
4. Salary of the Staff	

Particulars of Employees	Number
1. Agricultural Income Tax Officer	
2. Agricultural Income Tax Inspectors	
3. Junior Superintend /Head Clark	
4. U.D. Clark	
5. L.D. Clark	
6. Peon	
7. Clerical Attender	
8. Typist	

Whether compounding system has improved the efficiency of tax collection?

(Yes/No)

Details:



Any other relevant information that may help the study:

NIB 4621