PERFORMANCE AND IMPACT OF REGIONAL RURAL BANKS - A CASE STUDY OF MALAPRABHA GRAMEENA BANK IN KARNATAKA

SHIVANAND B. HOSAMANI

DEPARTMENT OF AGRICULTURAL ECONOMICS
UNIVERSITY OF AGRICULTURAL SCIENCES,
DHARWAD-580 005

OCTOBER, 1995

PERFORMANCE AND IMPACT OF REGIONAL RURAL BANKS - A CASE STUDY OF MALAPRABHA GRAMEENA BANK IN KARNATAKA

Thesis Submitted to the
University of Agricultural Sciences, Dharwad
in partial fulfilment of the requirements for the
Degree of

Doctor of Philosophy

in

AGRICULTURAL ECONOMICS

By
SHIVANAND B. HOSAMANI

DEPARTMENT OF AGRICULTURAL ECONOMICS
UNIVERSITY OF AGRICULTURAL SCIENCES,
DHARWAD-580 005

OCTOBER, 1995

DEPARTMENT OF AGRICULTURAL ECONOMICS

UNIVERSITY OF AGRICULTURAL SCIENCES, DHARWAD

CERTIFICATE

This is to certify that the thesis entitled **"PERFORMANCE AND IMPACT OF REGIONAL RURAL BANKS - A CASE STUDY OF MALAPRABHA GRAMEENA BANK IN KARNATAKA"** submitted by **MR. SHIVANAND. B. HOSAMANI** in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY IN AGRICULTURAL ECONOMICS of the University of Agricultural Sciences, Dharwad, is a record of research work done by him during the period of his study in this University under my guidance and supervision and the thesis has not previously formed the basis for an award of any degree, diploma, associateship, fellowship or other similar titles.

DHARWAD

October, 1995

(G.K. HIREMATH)

MAJOR ADVISOR.

APPROVED BY :

CHAIRMAN : _____ 27/11/95

(Dr. G.K. HIREMATH)

MEMBERS : _____

(Dr. K.N. RANGNATHA SASTRY)

: _____ 27.11.95

(Dr. T. SWAMY RAO)

: _____

(Sri. C.P. KATTI)

: _____ (A.R.S. Bhat)

(Sri. A.R.S. BHAT)

Affectionately Dedicated
To
My Beloved Parents

ACKNOWLEDGMENT

At the very outset, I express my deepest sense of gratitude and profound indebtedness to Dr. G.K. Hiremath, Professor and Head, Department of Agricultural Economics, University of Agricultural Sciences, Dharwad and the Chairman of my Advisory Committee. His valuable guidance, sustained encouragement, critical comments and constructive suggestions have finely shaped my present endeavour. I feel really proud for the privilege of being his student and I feel short of words to express my deepest sense of gratitude for all that he has done as a major advisor.

I record with sincerity my profound sense of gratitude to Dr. T. Swamy Rao, Professor and Head, Dept. of Genetics and Plant Breeding, Sri. C.P. Katti, Associate Professor of Agronomy and Sri, A.R.S. Bhat, Assistant Professor of Statistics, University of Agricultural Sciences, Dharwad, the members of my advisory committee, for all the guidance, encouragement, valuable suggestions, constructive criticism and critical evaluation of the manuscript.

I feel dearth of words to express my gratitude to Dr. K.N. Ranganatha Sastry, Project Co-ordinator, Dry Land Development Board, Bangalore, who is also a member of the advisory committee and a source of inspiration and moral

support. It is his affectionate encouragement which has enlightened my life towards the hopeful progress.

I sincerely express my thanks to respectable Director of Instruction (PGS). Dr. U.G. Nalawadi and Directors of Instructions. Dr. S.A. Patil, Dr. A.S. Prabhakar, Dr. Satyanarayan Rao, Dr. R. Parameshwarappa, UAS, Dharwad for their encouragement and timely help during my study period.

I place on record my deep sense of gratitude and heartfelt thanks to my dearest uncle, Dr. M.I. Savadatti, Vice-chancellor, Mangalore University, a source of inspiration, help, guidance and encouragement throughout my carrier and personal life.

I shall avail of this opportunity to express my sincere and heartfelt deep sense of gratitude to Dr. K.C. Hiremath, Professor and Head, Department of Agricultural Economics (Rtd.) and professor, WALMI, Dharwad, for his encouragement, help and advice in all my endeavours.

I gratefully acknowledge the co-operation and help extended by all the members of the staff of Agricultural Economics, Dr. L.B. Kunnal, Mr. Srikantha Murthy, Mr. B.K. Naik, Mrs. Jayashree, Mr. Koppad, Miss. Amruta and Mr. Devagiri.

I express my heartfelt thanks to the staff members of the Department of Agricultural Marketing and co-operation. Dr. H.G. Shankara Murthy,, Professor and Head, Dr. H.S.Vijaykumar, Dr. L.K.Wader, Sri. H.S.S. Khan , Mr.N.N. Karnool, Mr. J.S. Sonnad Mr. Mahajanshetty and Dr. Basavaraj for their co-operation and encouragement.

I am extremely grateful to Dr.H. Basavaraj, Mr. V.S. Kulkarni, Dr. T.N. Venkatesh Murthy, Dr. S.M. Mundinamani, UAS, Dharwad for their unquantifiable help in analysing the data and developing the first draft of the thesis. My special thanks are due to Mrs. Rajalakshmi Bilagi, Assistant Professor of English, for having corrected my draft patiently, besides guiding in writing the draft.

I must gratefully mention my heartfelt thanks to the Directors and officials of MGB, especially to Sri. K.M. Udupa, honorable chairman, for his kind co-operation and encouragement which actually initiated the project. I must also be grateful to Sri. Anantha Krishna, the new chairman, who reared up my project with the same enthusiasm, kindness and co-operation. I also take this opportunity to thank Sri. Dhananjay Sri. Ganesh Kamath, General Managers, the staff members of the Bank and selected branches Viz. Arekurahatti, Tirlapur, Nesaragi and Khanagaon, especially Sri. Bani, Sri. Vaman, Sri. Agnihotri, Sri. Gadagkar, Sri. Aladakatti, Sri. Navinkumar, Sri. Padaki, Sri. Nadaf, Sri. Madhyast, Sri. V.R.Patil, Sri. L.B. Patil, Sri. Puranik and many others, for being kind enough to provide the information needed and also sustained encouragement and sposoring my study.

I would be failing in my duty if I donot mention the names of Sri. Swamy ,District Manager, NABARD and Sri.Krishnan Lead Bank Manager, who have extended all help and encouragement during the course of investigation.

Words are inadequate to express my feelings and heartfelt thanks to my friend, Dr. M.G. Bhat, Assistant Professor, Miyami University, USA, for his timely advice, help and encouragement.

I am overwhelmed with sincere feelings of indebtedness to all the members of my family particularly my parents, brother Rudrappa, beloved wife Mrs. Saroja, son Chi. Vinayak and daughter, Chi. Keerti, Preety Jyoti and Sanjay and brother-in-laws, Amrut, Shankar, Sanjay and my sisters, cousins, relatives and Kotur family members for their inspiration, love and good wishes which motivated me to work towards the cherished goal.

My sincere thanks to my dear friends and well wishers Sri Mamale Desai, S.T. Patil, Y.N. Havaldar, S.D. Dabali, Dr. B.L. Patil, S.A. Patil, Menasinahal, Malligwad, Angadi, Chandargi, Dr. V.S. Gidnavar, S.N. Mageri, A.B. Hukkeri Vykarnal, L. Manjunath, Ramesh, Chattannavar, Dr. Umesh and Sri. N.V. Chikkanagoudar.

I also extend my thanks to Mr. Krishna Reddy and Mr. Anand of Institute of Information Technology, Narayanpur, Dharwad, for getting the thesis neatly typed on time.

I shall express my gratitude to all those who have helped me directly or indirectly during the tenure of my study.

(Shivanand. B. Hosamani)

CONTENTS

Chapter	Title	Page
I	INTRODUCTION	1
1.1	Specific objectives	12
1.2	Scope of the study	13
1.3	Presentation of the study	13
II	REVIEW OF LITERATURE	15
2.1	Performance Evaluation through Ratio Analysis	16
2.2	Performance Evaluation through Multi -variate Analysis	21
2.3	Credit Flow Pattern	27
2.4	Overdues Analysis	31
2.5	Performance of Regional Rural Banks	38
2.6	Impact of Regional Rural Banks	54
III	METHODOLOGY	59
3.1	Profile of the Study Area	59
3.2	Sampling Procedure	69
3.3	Nature and Sources of Data	76
3.4	Analytical Techniques Employed	82
3.5	Concepts used in the Study	113
IV	RESULTS	116
4.1	Performance of Malaprabha Grameena Bank	117
4.1.1	Performance Indicators of the Malaprabha Grameena Bank	117

Contd...

Chapter	Title	Page
4.1.2	Analysis of the Bank's Performance through Ratios	120
4.1.3	Growth Pattern of Malaprabha Grameena Bank	137
4.1.4	Pattern of Credit Flow and Deposit Mobilisation	143
4.1.5	Measurement of Branch Performance	153
4.1.6	Capital Adequacy Level of the Bank	161
4.1.7	Break-even Volume of Business of Bank	163
4.1.8	Relative Performance of the Bank	168
4.1.9	Overdues of the Bank	178
4.1.10	Association between Managerial Efforts and Business Performance	188
4.2	Impact of Malaprabha Grameena Bank	190
4.2.1	Credit Share of Malaprabha Grameena Bank	190
4.2.2	Impact of Malaprabha Grameena Bank on Beneficiaries	193
4.3	Assessment of the Working of Malaprabha Grameena Bank	196
4.3.1	Opinions of the Policy Makers of the Bank	198
4.3.2	Opinions of the Officials of the Bank	200
4.3.3	Opinions of Other Bankers	202
4.3.4	Opinions of Beneficiaries of the Bank	206
V	DISCUSSION	210
5.1	Performance of Malaprabha Grameena Bank	211
5.1.1	Performance Indicators of the Malaprabha Grameena Bank	211
5.1.2	Analysis of the Bank's Performance through Ratios	221

Contd...

Chapter	Title	Page
5.1.3	Growth Pattern of Malaprabha Grameena Bank	239
5.1.4	Pattern of Credit Flow and Deposit Mobilisation	249
5.1.5	Measurement of Branch Performance	258
5.1.6	Capital Adequacy Level of the Bank	260
5.1.7	Break-even Volume of Business of Bank	261
5.1.8	Relative Performance of the Bank	263
5.1.9	Overdues of the Bank	271
5.1.10	Association between Managerial Efforts and Business Performance	276
5.2	Impact of Malaprabha Grameena Bank	277
5.2.1	Credit Share of Malaprabha Grameena Bank	277
5.2.2	Impact of Malaprabha Grameena Bank on Beneficiaries	279
5.3	Assessment of the Working of Malaprabha Grameena Bank	284
5.3.1	Opinions of the Policy Makers of the Bank	284
5.3.2	Opinions of the Officials of the Bank	286
5.3.3	Opinions of Other Bankers	288
5.3.4	Opinions of Beneficiaries of the Bank	294
VI	SUMMARY AND POLICY IMPLICATIONS	298
VII	REFERENCES	323
VIII	APPENDICES	338

LIST OF TABLES

Table No.	Title	Page No.
3.1.	Salient Features of the Study Area and Sample Taluks (1991-92)	62
3.2.	Land Utilisation Pattern in the Study Area and Sample Taluks (1991-92)	64
3.3.	Cropping Pattern in the Study Area and Sample Taluks (1991-92)	66
3.4.	Area Irrigated by Different Sources (1991-92)	67
3.5.	Financial Institutions as on March 1994	70
3.6.	Details of the Beneficiaries Included in the Sample	75
3.7.	Sub-periods of the study of Malaprabha Grameena Bank	79
3.8.	Physical Performance Indicators of Malaprabha Grameena Bank	80
3.9.	Financial Performance Indicators of Malaprabha Grameena Bank	81
3.10.	Variables Influencing the Performance of the Malaprabha Grameena Bank (Policy Makers)	83
3.11.	Variables Influencing the Performance of the Malaprabha Grameena Bank (officials)	84
3.12.	The Key Elements of Spread and Burden and their Relationship with Profit	97

Contd....

Table No.	Title	Page No.
3.13.	List of Various Ratios Selected for Analysis of Spread, Burden and Profitability of Malaprabha Grameena Bank.	98
3.14.	Equations for the Calculation of Spread, Burden and Profitability Ratios	99
3.15.	Risk Weightage Pattern	108
4.1.	Physical Performance Indicators of Malaprabha Grameena Bank	118
4.2.	Financial Performance Indicators of Malaprabha Grameena Bank	121
4.3.	Liquidity Ratios of Malaprabha Grameena Bank	124
4.4.	Tests of Solvency	127
4.5.	Tests of Strength	128
4.6.	Tests of Profitability	130
4.7.	Tests of Efficiency	132
4.8.	Spread, Burden and Profit of Malaprabha Grameena Bank from 1976 to 1994	134
4.9.	Analysis of Spread, Burden and Profitability Ratios of Malaprabha Grameena Bank	136
4.10.	Compound Growth Rate of Physical Indicators of Malaprabha Grameena Bank	138
4.11.	Commpound Growth Rate of Financial Indicators of Malaprabha Grameena Bank	141
4.12.	Purposewise Flow of Credit from Malaprabha Grameena Bank (1984-1994)	145
4.13.	Flow of Credit from Malaprabha Grameena Bank to Different Beneficiaries (1984-1994)	147
4.14.	Gini Coefficients for Flow of Credit from Malaprabha Grameena Bank	150

Contd...

Table No.	Title	Page No.
4.15.	Composition of Deposits of Malaprabna Grameena Bank	152
4.16.	Average Percentile Score of each Selected Branch of Malaprabha Grameena Bank (1994)	155
4.17.	Mean Values of the Physical Variables	156
4.18.	Mean Values of the Financial Variables	157
4.19.	Mean Differences of Different Categories of Branches (Physical Indicators)	159
4.20.	Mean Differences of Different Categories of Branches (Financial Indicators)	160
4.21.	Capital Adequacy Analysis of Malaprabha Grameena Bank	162
4.22.	Break-even Volume of Business of Malaprabha Grameena Bank	164
4.23.	Assets and Liabilities at Breakeven Volume of Business (1993-94)	166
4.24.	Projected Assets and Liabilities of the Bank	167
4.25.	Principal Components and Factor Loadings of Physical Indicators Influencing the Performance of Malaprabha Grameena Bank	169
4.26.	Physical Performance Indicators with High Factor Loadings of Malaprabha Grameena Bank	170
4.27.	Principal Components and Factor Loadings of Financial Indicators Influencing the Performance of Malaprabha Grameena Bank	172
4.28.	Financial Performance Indicators with High Factor Loadings of Malaprabha Grameena Bank	173
4.29.	Principal Components and Factor Loadings of Physical and Financial Indicators Influencing the Performance of Malaprabha Grameena Bank	175

Contd

Table No.	Title	Page No.
4.30.	Performance Indicators with High Factor Loadings of Malaprabha Grameena Bank	176
4.31.	Demand, Recovery and Balance position of Malaprabha Grameena Bank	179
4.32.	Agewise and Sectorwise Overdues of Malaprabha Grameena Bank	181
4.33.	Activity-wise Overdues of Malaprabha Grameena Bank	183
4.34	Percentage Contribution of Individual Characteristics to the Total Distance Measured.	185
4.35	Comparison of the Classification of Defaulters	187
4.36	Number of Circulars issued and Growth performance of Malaprabha Grameena Bank	189
4.37	Credit share of Malaprabha Grameena Bank	192
4.38	Impact of Bank Finance on the Income of Borrowers	194
4.39	Impact of Bank Finance on the Employment of Borrowers	197
4.40.	Aggregation of Clusters of Variables on the Performance of Malaprabha Grameena Bank According to it's Policy Makers	199
4.41.	Aggregation of Clusters of Variables on the Performance of Malaprabha Grameena Bank according to its Officials	201
4.42.	Opinion of other Bankers on the Performance of Malaprabha Grameena Bank	203
4.43.	Opinion of other Bankers on the Policy Matters of Malaprabha Grameena Bank	205
4.44	Opinions of Borrowers about Malaprabha Grameena Bank	207

LIST OF FIGURES

Figure No.	Title	Between Pages
3.1	Map of Karnataka State showing Jurisdiction of of MGB	59-60
3.2	Map Belgaum district Showing the Study Area	60-61
3.3	Map Dharwad district Showing the Study Area	61-62
4.1	Trends in Manpower and Coverage of MGB	118-119
4.2	Trends in Accounts of MGB	118-119
4.3	Trends in Per Branch Accounts of MGB	118-119
4.4	Trends in Financial Performance of MGB	121-122
4.5	Trends in Income-Expenditure And Overdues of MGB	121-122
4.6	Trends in Per Branch Performance of MGB	121-122
4.7	Trends in Borrowing and Per Employee Indicators of MGB	121-122
4.8	Lorenz Curves (Purposewise)	150-151
4.9	Lorenz Curves (Beneficiarywise)	150-151
4.10	Association Between Managerial Efforts and Business Performance	189-190

CHAPTER - I

INTRODUCTION

I. INTRODUCTION

Agriculture continues to be the mainstay of the Indian economy and an effective antidote to poverty and unemployment. Recognising the importance of agriculture in the economic development of the country, adequate emphasis has been assigned in each successive Five Year Plans. Agricultural development was slow for two decades but has kept pace with the growing demand for the products since mid sixties, registering a growth in food grains production of 2.31 per cent between 1967-78 and increased to 2.68 per cent between 1977-1989. (Hanumantha Rao, 1989). Self sufficiency in the production of food grains and edible oils is not a small achievement if viewed with a steady uptrend in growth of population. However, in the last decade,signs of stagnation and even some degree of deceleration in few crops have been noticed and calls for immediate attention.

The annual growth rate in agriculture has to be atleast four per cent during the present decade (versus 2.3 per cent in the Eighties) to achieve full employment on the needed scale. It is not the conventional agriculture but the maximisation of the potential of agri-business that holds the answer for this - the monumental challenge. If proper measures are adopted it can create 100 million permanent, year round jobs for the rural and urban poor, besides adding Rs. 77,000

crores to the agricultural income and take the growth of GDP to upwards of four per cent annually. (Raghavan, 1992). Further, growth in agriculture requires larger investment enabling better use of all the resources. But the fact is that the rate of investment in agriculture has declined in recent years. The growth rate of capital formation during 1960's was 5.2 per cent and has been continuously declining,since the year and reached 1.1 per cent during eighties which would probably indicate the recent stagnation in Indian agriculture from which a good lesson is to be essentially learnt.

In the 1950's and 1960's growth in agriculture was led by area growth and further supported by expansion of irrigation potential. Creation of irrigation potential and improvements in infrastructural facilities were the major areas of massive public sector investments. Private investment by farmers was largely for making use of these facilities. The growth of farm sector was largely through extensive cultivation and a limit to which came into sharp focus in the sixties. Introduction of new technology in various aspects of rural sector became very much intensive.

India's agricultural growth was symbolised by the famous 'Green Revolution' which needs to be recognised as a successful chapter even though greater challenges lie ahead like increasing the tempo of agricultural growth needs to feed over 1,000 million people by 2000 A.D. when 240 milion tonnes

of food grains will be required annually and also other priorities such as exports. (Jain, 1992). If India is to achieve a break through in exports to cover its amortisation of its borrowings and their interest payments on its $ 91 billion foreign debt, it needs to increase its exports by 20 to 25 per cent as against ten per cent in the current year.

With the breakthrough in farm technology, nowadays agriculture has become increasingly capital intensive in terms of augmentation of productivity both land and human labour. The adoption of new technology requires a sizeable, additional amount of capital for the purchase of variable inputs viz., seeds, fertilizers, plant protection chemicals. Added to this the new technology calls for massive investment for building infrastructure on the farm front by the farming community. Farmers cannot meet the huge investment in farm sector out of their own savings. Thus the cultivators invariably depend on external finance for the adoption of new farm technology.

The demand for credit has been increasing continuously over the years and it was estimated that the credit requirement was about 27,551 crores in 1989-90 and increased to Rs. 57,000 crores in 1994-95 and it is projected that nearly Rs. 1.11 lakh crores will be required by 2000 AD (Vinod Rao, 1994).

Farm credit has been recognised as a strategic input in agricultural development in view of longer gestation period of farm enterprises, lower resource base and savings of the farmers. There were many studies in the past to show a positive impact of credit on farm economy (Chattopadhya, 1965 and Gadgil, 1986). It was found that states with the highest yield (Punjab and Haryana) also happened to be the states with the largest availability of farm credit. Hence, adequate and timely availability of credit has become **sine-qua-non** in the strategy of agricultural development as well as the upliftment of the rural sector.

Among the various factors responsible for economic development and poverty alleviation, the role of financial institutions is considered very significant. The overall development of the economy depends, to a large extent on the financial institutions that supply capital for the production of goods and services, which in turn raises the income and standard of living of the people. The financial institutions form the key component of the financial infrastructure that stimulates sustainable economic growth. National planners of our country have strategically decided to use the organised part of Indian banking system as an instrument for accelerating rural development. Providing affordable credit to the rural population has long been a prime component of development strategy. The Central Monetary Authority could never lose

sight of the strategic role of agriculture and agro-based activities in the rural areas in promoting a balanced, equitable and self reliant pattern of development.

Efforts to build up the institutional credit system for agriculture commenced with the adoption of the Co-operative Societies Act in 1904 to institutionalise credit channels, since the system of loans advanced by the Government under Taccavi was a failure for number of reasons. Gradually, the cooperatives assumed more positive role and there was not only a steady quantitative expansion in their numbers but also a growing diversity in their functions. The performance of co-operatives, however, was far from satisfactory as was evident from the All India Rural Credit Survey Committee Report (1954). The committee noticed that in the year 1951-52, only 7.3 per cent of the rural credit was supplied by institutional sources (Government 3.3 per cent, co-operatives 3.1 per cent and commercial banks 0.9 per cent). The cooperative movement has undergone far reaching changes based on the recommendations made by successive organisations and expert committees like the All India Rural Credit Survey Committee (1952), The National Development Council (1958), Shri. Mehta Committee (1960), Shri Patel Committee (1961), The conference of State Ministers of Cooperation (1964), All India Rural Credit Review Committee (1966), so as to embrace all aspects of the economic and social life of the rural Indians. Attempts in making the cooperatives

an effective tool in overall economic development did not produce the desired results. The weaknesses of the cooperative credit agencies have been brought out in the report of the Committee (working group) on Rural Banks, RBI (1975), Report of the study team on overdues of cooperative credit Institutions, RBI (1974) and Report of the committee on Integration of Cooperative Credit Institutions. The main limitations were lower credit share of small holders, lack of provision for non cultivators, dormancy, inability to shoulder the responsibility, deficiency in lending policies, increasing overdues, all of which affected the ability of the cooperatives to extend further credit facilities, besides palting in serious doubt the credit-worthiness of the co-operatives themselves.

In view of the limitations of the co-operatives and considering the large and growing gap in meeting the credit needs of developing agriculture and allied activities, the Government encouraged commercial banks to provide more and more credit to agriculture and other priority sectors. The nationalisation of 14 commercial banks in 1969 was regarded as a watershed in this direction.

Commercial banks were expected to play a dominant role in minimising regional imbalances in economic development of the economy. In the period following nationalisation of banks, the Indian banking system has made phenomenal strides in the volume of its business even it has diversified its activities in a significant fashion.

Commercial banks too had their weaknesses. Even with much increased network of rural branch offices, the commercial banks could not reach out to the interior and rural hinterlands. Commercial banks were participating in rural banking only as aliens to this field, since, they were programmed for meeting the financial requirements of trade and commerce. The commercial banks continued to use the deposits mopped up by their rural branches for meeting the credit needs in urban areas. Commercial banks have gone wherever cooperatives were well established and extended credit to segments enjoying cooperative credit. The Review Committee on Regional Rural Banks observed, that the agricultural credit by Commercial banks has been additive and has not helped to cover the geographical areas not having the availability of credit facility from the cooperatives (RBI, 1978). High cost structure and lack of rural orientation were their handicaps. Over the years, the productivity, efficiency and profitability of the system have suffered. Not withstanding all the tall claims made by the Government at the time of each policy change, Indian banks continue to be essentially lenders only, rather than developmental agencies.

The proposal for setting up of some sort of `rural banks' was mooted by the Banking commission in 1972. It recommended such banks for a compact group of villages, mostly autonomous in character and also to be managed by the local leadership to ensure local response and participation.

The Government of India also felt that it was necessary to establish "New Institutions on the basis of attitudinal and operational ethos entirely different from those obtaining in the public sector banks". In pursuance of this view, the Government of India appointed a working group on Rural Banks on 1st July 1975, under the Chairmanship of Sri. Narasimhan (then Additional Secretary in the Department of Banking and later Governor of RBI) to examine indepth the setting up of new Rural Banks as subsidiaries of public sector banks to cater to the financial requirements of rural people. The group identified the various weaknesses of the cooperative credit agencies and commercial banks and felt that the existing institutions with their present structure would not be able to fill the regional and financial gap in the rural credit system within a reasonable period of time even with such adaption, reorganisation and restructuring as might be considered. The committee recommended for the establishment of Regional Rural Banks (RRBs) which should be state sponsored, regionally based, rural oriented, and combine the feel of Co-operatives as well as the degree of business organisation of the commercial banks. The recommendations of the working group were mutatis mutandis accepted by the Government and on 26th September 1975, the Government of India promolgamated an ordinance to provide for the incorporation and regulation of the Regional Rural Banks to develop agriculture, trade, industry and other productive activities, by providing credit and other

facilities. The RRBs which form the third constituent of multi agency credit system for agricultural and rural development were to focus exclusively on the small and marginal farmers, agricultural labourers and rural artisans. The first five banks in four states commenced business on 2nd October 1975, at Moradabad and Gorakpur in Uttar Pradesh, at Bhiwani in Haryan at Jaipur in Rajastan and at Malda in West Bengal. The ordinance was subsequently replaced by the Regional Rural Banks Act, 1976. These RRBs were not there to supplant the existing institutions, but only to supplement them.

The RRBs after many experimentations have ultimately emerged as development inducing institutions. It has been documented from many studies in the past about the performance of RRBs, that they have really made good progress in many areas and made their presence felt among the rural masses in the field of agricultural credit. The number of RRBs had increased from a mere six in the year 1975 to 196 in the year 1994. Number of districts covered also increased from 12 to 398 and the branches from 17 to 14,561 during the same period. The deposits mobilised had also increased from Rs. 20 lakhs to Rs. 8299.83 crores, whereas the advances increased from Rs. 10 lakhs to Rs. 5106.88 crores.

The RRBs, ever since their inception, have been subjected to criticisms with regard to their concept, coverage and viability, even though these banks have made considerable

impact by making banking services accessible to the rural poor and instilling banking habits in them and providing capital assistance to the target groups. However, from the point of view of financial soundness, the performance of RRBs has not been an unqualified success for various reasons, most important among them are the defects in their operational methods. While only 14 RRBs in the Country were incurring a cumulative loss of Rs. 2510 during 1976 their number went upto 179 in 1993, with accumulated loss of Rs. 9045 lakhs.

In this background, various committees were appointed to look into the aspect of viability. The Dantawala Committee (1977) recommended for continuation as also expansion of RRBS, but as an integral elements of rural credit system. The RBI study on viability headed by Sivaraman (1981) opined that each RRB would require about six years, and a net work of 70 branches having outstanding loan business of Rupees eight crores to attain viability. The recommendations of the Kelkar Committee, lead to the amendment of RRBs Act (1987) to enhance authorised share capital to Rupees five crores and paid up capital to Rupees one crore. The Agricultural Finance Corporation study at the instance of NABARD, recommended for establishment of urban branches with all banking facilities on the lines of commercial banks.

The recent reports by Narasimhan and Khusro committees on Financial sector Reforms stated that the non

viability of RRBs was a built in phenomenon which was evident from the meagre number of RRBs earning profit (27 out of 196). Narasimhan had proposed options, the implementation of which was subject to the decision of RRBs, but Khusro was very harsh and even stated that RRBs did not find a place in the financial sector and hence, they should be either merged with sponsor banks or eliminated by creating rural subsidiaries of commercial banks. But the Government considered the recommendations made by these committees and took a decision to revamp these RRBs and strengthen their capital base. The Government has decided to restructure 49 RRBs The committee for such restructuring consisted of representatives of RBI, NABARD and the chairmen of four public sector banks such as Bank of Baroda, Punjab and Sindh Bank and Chairmen of concerned RRBs. A meeting of this committee was held under the Chairmanship of Special Secretary (Banking) and modalities for restructuring were drawn up. Each RRB in consultation with sponsoring bank, has to prepare a five-year plan to attain viability which was commonly known as Development Action Plan (DAP). It is hoped that through this plan the RRBs would attain viability and continue to function as a vital financial institution in the country. In view of the above divergent views on the performance of RRBs, an objective and rigoures evaluation on the performance of RRBs was felt. The Malaprabha Grameena Bank was one of the RRBs considered for restructuring in Karnataka. Hence, the present study has been taken up with the

overall objective of evaluating the achievement of Malaprabha Grameena Bank vis-a-vis its stated objectives.

1.1 Specific Objectives :

The specific objectives of the study were;

1. to analyse the growth and performance of Malaprabha Grameena Bank in terms of physical and financial indicators.

2. to assess the credit flow and its impact on income and employment of borrowers.

3. to measure the performance of the selected branches of the bank.

4. to work out the capital Adequacy and Break-even volume of business of the bank.

5. to analyse different dimensions of the overdues.

6. to analyse the association between managerial efforts and business performance of the bank during the turn around period.

7. to elicit the opinions of the Directors, officials, other bankers and borrowers about the functioning of the bank.

8. to suggest appropriate policy measures for better performance.

1.2 Scope of the study

In the present study a holistic attempt has been made to evaluate the performance of Malaprabha Grameena Bank. Both quantitative as well as qualitative variables were considered for the study. The views of the Directors of the bank, officials, other bankers and borrowers were taken into consideration about the performance of the bank. The main emphasis of the investigation was placed on the working of the bank and its impact on the borrowers. Earlier studies either concentrated on performance of the institution or schemes or some times the impact of the programmes. The opinions of the non-officials and officials were not taken cognigence. Thus the performance of the institution was not subjected to quantitative and qualitative aspects. Therefore, the conclusions drawn were broadly applicable to those institutions operating under similar situations. The present study would help the planners, policy makers and administrators in policy formulations and implementation.

1.3 Presentation of the study

The entire study has been presented in six chapters. Chapter-I, deals with the significance of the problem, the issues involved and the specific objectives of the study. Chapter-II that follows, includes the review of earlier studies connected with the present investigation. Chapter-III is

devoted to the description of the study area, the nature and sources of data, the tools and techniques of analysis adopted for evaluating the objectives. The next chapter summarises the results under appropriate heads, consistent with the objectives of the study, while Chapter-V provides explanation for the causal relationships between certain variables and the outcome which they produced. It also tries to provide a frame of reference for drawing policy measures. The last chapter summarises the overall results and brings out the major policies to improve the performance of Regional Rural Banks.

CHAPTER - II

REVIEW OF LITERATURE

II. REVIEW OF LITERATURE

With a view to evaluate the objectives of the study, it was considered desirable to have an idea of the findings of some of the earlier research studies and the methods adopted therein. Such a review of literature connected with the working and performance of Regional Rural Banks in India and abroad as well as related financial institutions, it was hoped, would provide a basis either for confirming the earlier findings or for contradicting them and thereby suggest points of departure for further studies.

Consistent with the objectives of the study, the review of literature is presented under the following heads.

2.1 Performance Evaluation through Ratio analysis

2.2 Performance Evaluation through Multivariate analysis

2.3 Credit flow pattern

2.4 Overdues analysis

2.5 Performance of Regional Rural Banks

2.6 Impact of Regional Rural Banks

2.1 Performance Evaluation through Ratio Analysis

Foulke (1945) employed the ratio of total debt to networth, current ratio and the ratio of fixed assets to networth to evaluate the business performance. He opined that the financial analysis assumed to be an important tool to assess the business performance.

Krishna Rao (1963) employed solvency ratio, profitability ratio and turnover ratio to identify the financial weakness as well as strength of cooperatives in Madras. He opined that more ratios are quite useful in assessing the overall financial position of the organisations.

Reed (1964) observed that, two ratios were commonly used to get a rough idea of liquidity of banks.They were the ratio of loans to deposits and liquid assets to total assets relating to commercial banks. He opined that the ratio analysis was becoming an important tool of credit analysis and these were excellent indicators, rather than ends.

Page *et al* . (1970) employed the current ratio as a test of liquidity. The total liability to networth ratio and fixed assets to networth ratio were used to test the solvency

position of cooperatives and net earnings to net worth to test the profitability.

Eugene and Lerner (1971) mentioned that the ratio analysis was a widely used technique in analysing financial statements. He suggested that the profitability ratio measures overall operating performance of business. He recommended to use liquidity ratio and turnover of various types of assets respectively in the business.

Sridharan (1975) employed a horizontal type of financial statement analysis technique in measuring the change in financial position of the business. He used total liabilities to owned funds to measure solvency, liquid assets to total assets to measure the liquidity, net profits to sales, net profits to fixed assets and net profits to owned funds to measure the profitability of the institution.

Rao and Dua (1977) in their study found that the current ratio was lower compared to the conventional norm of 2:1. The total liabilities of most of the firms studied exceeded their networth.

Lawrence and Haley (1977) considered liquidity ratio, profitability ratio and activity ratio as leverages to measure and evaluate the overall financial position of a business.

Patavardhan (1978) employed six different financial ratios to study corporate financing in India, they are (i) total borrowings as percentage of liabilities (ii) networth as percentage of total liabilities (iii) debt as percentage of equity; (iv) inventories as value of production (v) borrowings from others as percentage of borrowings and (vi) sundry creditors as percentage of inventories.

Natarajan *et al*.(1980) analysed the working of consumer Co-Operatives in Andhra Pradesh and mentioned that the current ratio of 2:1, quick ratio of 1:1, inventory ratio, net profit margin, return on assets and return on share capital were the best standards of evaluation. The results of their analysis showed that the liquidity position was not satisfactory. The causes for the poor performance of consumers cooperatives were excess financing over equity, poor inventory turnover, heavy establishment and contingent expenses in proportion to sales, huge stocks of inventory and ineffective utilisation of funds.

Anand (1981) employed solvency ratio, stock to working capital ratio, profitability ratio and gross profit ratio to evaluate the financial position and performance of the State Consumer's Federation in Maharashtra. Ananth (1984) using similar ratios evaluated the performance of the Grape Grower's Marketing and processing cooperative society, Bangalore. Subba Rao (1985) applied similar ratios for performance evaluation of the Central Arecanut Marketing and Processing Co-operatives Ltd., Mangalore.

Shankara Murthy (1986) evaluated the performance of Karnataka State Co-operative Marketing Federation Ltd., employing the tests such as solvency tests, liquidity tests, the profitability test and turnover tests, efficiency tests and tests of strength over a period from 1960-61 to 1984-85.

Jagadeesha et al. (1990) in their study on performance of Tungabhadra Grameena Bank (RRB) in Karnataka assessed the growth of the bank in terms of physical and financial indicators employing ratio analysis. They found that there was substantial increase in physical and financial indicators of the bank.The current ratio was 1.68 ,C-D ratio was 183.85 per cent and the net capital ratio was 1.0215. However, the margin of profit earned by the bank was too low.

Sukumaran and Shaheena (1991) analysed the spread, burden and profitability management in Palghat District Co-operative Bank in Kerala considering the period 1977-1987. The results revealed that the profitability and interest expenditure of the bank showed a fluctuating but unfavourable trend throughout the reference period. Analysis of the spread ratio and burden ratio also indicates some deficiency in the fund management within the bank. A further probe of the Reserve Management of the bank throws some light on the excess and idle reserves kept by the bank during this decade which was an indication of ineffective management. A declining manpower expenses leads to some suspension relating to artificial window dressing of the balance sheet items. In short, the management of spread, burden and profitability within the bank was not that much effective and called for necessary steps to improve the position.

Reddy (1994) studied the financial performance of Mulkanoor Co-operative Rural Bank using liquidity. solvency, profitability and turnover ratios. The study revealed that the liquidity position of the bank was found to be sound as revealed by the current (2.09) and quick ratios (1.74). The solvency ratios showed that the bank has been following the

policy of low capital gearing with regard to longterm debt (0.17) and high capital gearing with regard to total debt (1.56). The performance of the bank in relation to it's profitability (2.42 per cent) and turnover was not up to the expected level (2.58 times) in view of the size and volume of business.

2.2 Performance Evaluation through Multivariate Analysis

2.2.1 Growth Rates

John Winfred (1985) studied the growth of land development banks considering the variables like membership, resources, Government support, floating of debentures, investments, loan operations, overdues, cost of management, profit and the cost of credit disbursed to weaker sections covering the period from 1969-70 to 1978-79. He used the following compound growth rate formula. He found that banks with limited loan transactions, non-diversification of their lending programmes and mounting overdues could not make any marked impact in the field of agricultural credit.

Ramola and Negi (1991) analysed the qualitative aspects and impact of Regional Rural Banks taking Ganga Yamuna Gramin Bank in Kashmir. There was a considerable growth in

branch expansion despite the constraints of limited resources, infrastructure facilities and manpower. The bank was successful in mobilising small savings, however the growth in deposits and repayments were not much impressive and the credit given for productive purpose has not resulted in increased production.

Khatkar et al. (1994) employed compound growth rate technique to study the trends in advances outstanding and overdues of primary agricultural credit and service societies in Haryana pertaining to the period 1981-82 to 1990-91. They found that the overdues and loans outstanding has risen significantly at higher rates (13.62 per cent and 11.34 per cent respectively) as compared to loans advanced and loans recovered (6.76 per cent and 7.15 per cent respectively). The total overdues increased from 21.79 per cent to 58.17 per cent between 1966-67 to 1990-91.

Reddy (1994) assessed the working of Malkanoor cooperative rural bank considering the variables share capital, reserve, deposits and borrowings for the period 1978-79 to 1992-93. The compound growth rates were calculated by Least square method of fitting an exponential function. The study

revealed that the growth rates were relatively higher for deposits, reserves and investments. Higher growth rates were observed for credit and non-credit services of the bank.

2.2.2 Principal Component Analysis

Shankara Murthy (1986) studied the performance of Karnataka State Co-operative Markering Federation and its impact on the farm market. He used factor analysis technique with principal component solutions in analysing the performance indicators of the federation over a period of 25 years. The factor analysis revealed the existence of two main underlying dimensions in the performance of the federation namely "Growth in physical and financial indicators" and "Growth in assets and liabilities".

Reddy et al. (1994) analysed the performance of PCARDBs in the districts of Karnataka and ranked them by applying principal component analysis on selected performance indicators. Eight districts were ranked as higher performance, six districts were categorised as medium and another five districts as low performance. Further, using discriminant analysis the factors contributing to the disparity between the districts where the PCARDBs were performing well from those

where they were not, was quantified. The discriminant function revealed that growth in working capital (49.7 per cent), deposits (32.85 per cent) and overdue loans (26.50 per cent) distinguished high performing banks from low performing banks.

2.2.3 Cluster Analysis

Aruna Rao and Bhat (1985) evaluated the distribution of rural credit by PACS in Karnataka. They used Kendall's coefficient of concordance (W) to study the pattern of flow of credit and cluster analysis to group the variables having similar growth patterns. They found that there was no significant change in the flow of credit to different purposes. A non-significant trend was observed with respect to marketing, processing and other non-agricultural operations. They felt that there was a need for structural change in credit policy of the primary societies.

Shankara Murthy (1986) employed cluster analysis technique to analyse the scores obtained from three different groups of respondents in the opinion survey, in order to evaluate the working of the Karnataka State Co-operative Marketing Federation Ltd., as well as that of the sample member societies. He used single linkage method to form the clusters.

2.2.4 Gini Coefficient

Bhale rao et al. (1988) assessed the extent and trend in the regional inequality in the supply of longterm credit by Land Development Bank with the help of Coefficient of variation, Gini coefficient and Lorenz curves for the two periods 1968-69 and 1980-81 in India. The analysis indicated an increase in the inequality in the distribution of longterm loans.

Dadhich (1994) analysed the distribution of land holding wise direct agricultural advances of scheduled commercial banks in India for the year 1990-91 with the help of Gini coefficient. The empirical evidence adduced by the study has brought to the fore that inspite of the highly skewed distribution of land in India, the distribution of credit was some what fair. As distribution of credit according to the size of loan was highly skewed as compared with distribution of credit according to the size of land holding.

2.2.5 Discriminant Function Analysis

Pandey and Muralidharan (1977) in their study on application of discriminant function in Agricultural Finance

attempted to develop criteria for classifying borrowers according to their willingness to repay the loans on the basis of differences in their socio-economic characteristics in Banda district of Uttar Pradesh. Literacy, percentage of income from sources other than the crop production to total income, operational size of holding and percentage of cash expenditure were the major characteristics which classified defaulters into willful and non-willful groups.

Sarup and Pandey (1982) examined the socio-economic characteristics discriminating the fertilizer users from non users in Cuttack district of Orissa with the help of discriminant function technique. The sample size of the fertilizer users and non-users were 74 and 36 respectively. The linear discriminant function used for the analysis was as follows. $Z = L_1X_1 + L_2X_2 \ldots\ldots + L_{10}X_{10}$

The variables considered were area under owned land, leased-in land, area under HYV, plant protection measures, organic manure, family members, literates, persons dependent wholly on farm, loan borrowed and previous loan outstanding.

Ramesh Chand and Sidhu (1985) used Linear Discriminant Function to measure the difference between

defaulters and non-defaulters of agricultural credit in Punjab. The defaulters with higher size of operational holding, higher capital expenditure, lower levels of education, higher ratio of dependents in the family, high consumption expenditure and net cash income were more prone to willful default and reverse was true for non willful defaulters.

Kalyankar and Rajmane (1987) used Linear Discriminant Function to predict whether a crop loan defaulter was likely to be a willful or non willful defaulter for District Central Co-operative Bank, in Parabhani district of Maharashtra. The variables considered were operational size of holding, proportion of cash crops, family consumption expenditure, gross income from agriculture and initial amount of loan. They concluded that if the 'Z' value is more than critical mean value, then the defaulter will be predicted as willful defaulter and if it is less, then he is likely to be non willful defaulter.

2.3 Credit Flow Pattern

Reserve Bank of India (1969) reported that the flow of credit was larger for big farmers than that for small farmers and substantial proportion of small farmers did not get Co-operative credit.

As per the survey conducted by the National Council of Applied Economic Research (NCAER) in 1970-71, 30.3 per cent of the total borrowings made by the cultivating households in the country was from three institutional agencies viz., Government, Co-operatives and commercial banks. Among these three agencies the share of the cooperative was the highest (22.70 per cent) followed by commercial banks (4.0 per cent) and then by Government (3.60 per cent).

Singh et al. (1978) found that RRB Farrukhabad concentrated mostly on crop loans followed by loans for the purchase of milch animals, small businessmen and rural artisans. It did not advance any amount for the purchase of tractor and installation of tube wells. The recovery performance was most unsatisfactory. They concluded that RBBs and commercial banks were new entrants in the field of rural finance and they lack trained and experienced personnel having rural background which had also adversely affected the recovery situation.

Kurulkar and Deogirikar (1980) evaluated the role of Marathwada Regional Rural Bank in ameliorating the economic upliftment of weaker sections during the year 1976 to 1978.

Major proportion of the beneficiaries were belonged to landless labour category, followed by small and marginal farmers. The study revealed that the percentage flow of credit to these weaker sections has shown a declining trend and recommended for reconsideration of loaning policies of the bank.

Committee to Review Arrangements for Institutional credit for Agriculture and Rural Development (CRAFICARD) revealed from it's report that total loans outstanding for agriculture increased from Rs. 1075 crores in June 1969 to Rs. 6325 crores in June 1980. Out of the total agricultural credit outstanding at the end of June 1980, cooperatives accounted for 59.4 per cent, commercial banks 38.8 per cent and Regional Rural Banks 1.8 per cent.

Srivastava and Subramanian (1982) noticed a steady growth in the number of RRB's over the period in India. In 1975 there were six RRB's with 17 branches and by 1979 there were 57 RRB's with 1990 branches, indicating 9.5 times and 117 times increase in banks and branches respectively. They concluded that the coverage of RRB's was uneven and the bulk of assistance both direct and indirect has gone to small and marginal farmers and agricultural labourers in confirmity with the objective of RRB's.

Haque and Verma (1988) analysed the temporal variations in the flow of credit to different regions and classes between 1971 to 1981. The results revealed that the private agencies of credit dominated the agricultural credit in many regions. A highly skewed distribution of institutional credit towards progressive regions and better off sections of the rural population. The authors recommended for the preparation of an egalitarion credit plan coupled with proper monitoring for balanced growth and development.

Singh (1988) studied the trend of loan disbursement, overdues and factors affecting repayment capacity of dairy borrowers of Bhojpur-Rohtas Grameena Bank, Bihar. The study revealed that the bank has exclusively financed the weaker sections and showed the image of small man's bank. The purpose-wise analysis of loans indicated that allied activities are more important for landless labourers and crop loans are important for small and marginal farmers. The recovery of allied activity loan was higher compared to crop loan. The regression analysis of factors affecting repayment capacity of borrowers revealed that the ratio of total expenditure to total income, number of adult equivalent consumer units, family expenses and old debt were major factors influencing repayment capacity of the borrowers.

Atibudhi and Singh (1994) analysed the flow of credit to different categories of farmers in Cuttack district of Orissa. Gini coefficient was worked out to know the concentration of credit and it was 0.66 which implied that flow of credit was skewed in nature towards large farmers.

2.4 Overdues Analysis

Mishra and Awasthi (1981) recommended the measures for effective recovery of loans by Central Bank of India, in Madhya Pradesh. The recommendations stressed the need for convenient loan procedure, need based lending, avoiding under rating of annual installments, debarring willful defaulters and non-repayment of loans due to non-controllable factors should be taken care of by insurance or other feasible means acceptable at the bank level to the borrower.

Lakshminarayan (1984) conducted the study on RRB's in Birbhum district of West Bengal and made the following recommendations to improve the recovery of loans advanced by Mayurakshi Grameena Bank and they were, i>. educational programmes emphasizing the need to make timely repayment of loan. ii>. necessity of establishing effective link between credit, marketing and other services. iii>.

dissemination of knowledge about improved technology in agriculture and allied fields.

Singh and Upadhyay (1984) conducted a study on loan recovery of RRB's in Bihar and found that the performance declined continuously. Inadequate arrangements for loan recovery was the main reason for lower recovery as experienced by bank officials. The reasons for non-repayment of loan given by the borrowers were failure of crops, social ceremonies, non persuation by the bank, anticipated declaration of moratorium and remission of loans by Government. The bankers suggest the measures for better recovery such as lending in cluster, timely reminders, tie-up arrangements with marketing agencies, support from government agencies and legal action against willful defaulters.

Bhavani Devi and Sitaraman (1985) estimated the repayment capacity of borrowers of cooperative Agricultural Development Bank in Andhra Pradesh with respect to installation of filter point pumpsets. They used a linear function to study the factors influencing repayment capacity.

The coefficient relating to the income from crop enterprise and off-farm income showed a positive and

significant impact on repayment where as the farming expenditure and family expenditure showed a negative and significant impact on the repayment capacity. The size of holding had a negative impact, but it's contribution was negligible.

Singh and Jain (1985) analysed the rural banking and it's challenges and found that many of the rural branches of banks were becoming economic dead weights with ever mounting overdues. The situation could be averted if there was proper expansion, planning before opening the branch and later proper supervision of the end use of credit. Government should also provide certain basic infrastructural facilities. Bhosale and Dangat (1988) studied the repayment position and factors responsible for non-repayment of loans. The repayment percentage showed an increasing trend between 1981-84. The results of the multiple linear regression indicated that the overdues was related with net income, amount borrowed, amount used for productive purpose and family consumption expenditure. Lower income, non-remunerative prices and crop failure due to natural calamities were among the reasons for non-repayment. Datta (1988) analysed the extent of default on minor irrigation scheme and the rationality of repayment schedule. It was found

that 80 per cent of the borrowers were defaulters comprising mainly small and marginal farmers.

Duhan and Singh (1988) found that the advances for dairying increased over the years. The overdues found to be declining and the defaulters were higher in small farmer category.

Kuchhadiya and Shiyani (1988) analysed the factors responsible for mounting overdues of Regional Rural Banks in general and Gujarat state in particular which affected adversely the functioning of the institution as they cannot get refinance facility from NABARD if the overdue per cent crosses 60 per cent. The causes were both internal and external to the bank. Remedial measures such as integration among different departments, proper identification of borrowers, supervision of end use, involvement of local agencies and youth and linking of credit with marketing re-orientation of loan policies, and recovery camps were suggested to improve the recovery position.

Reghuram and Bhavani Devi (1988) observed that the irregularity in the supply of water was responsible for default in one village as compared to a willful default in another

village. Further, it was observed in third village a cent per cent recovery due to strong leadership, repayment consciousness and the prompt repayment tradition. The authors suggested for provision of income generating assets in first village for improving recovery position.

Singh et al. (1988) analysed the extent of wilful default and factors responsible among different size groups of farms. The results showed that large farmers category had highest overdues and as well as willful default. The old overdues are also higher in large category farms. Stern action against willful defaulters and package of incentive for non-willful defaulters were suggested by the researchers.

Kuchadiya and Shiyani (1989) analysed the overdues position of 194 RRB's in the country and found that overdues constituted 51 per cent of the demand at the end of June 1986. State wise overdue position to demand indicated that Nagaland had highest overdue (78 per cent), followed by Tripura (71 per cent), West Bengal (61 per cent), Orissa (60 per cent), Bihar (59 per cent), and the lowest was observed in Punjab (16 per cent).

Singh and Balishter (1989) analysed the overdues position in different farm size groups, extent of willful default and the factors responsible in Agra district of Uttar Pradesh. Regression technique was used for analysis. The study revealed that the amount of overdues per small, medium and large farmers was Rs. 3425, Rs. 2240 and Rs. 5388 with an overall average of Rs. 3455. Large farmers accounted for 27 per cent of the total defaulters while about 42 per cent of the total overdues. About 53 per cent of the defaulters were willful defaulters. The important factors responsible were amount of loan borrowed, loan put to unproductive use, size of holding and repayment capacity.

Balishter et al. (1991) studied the overdues of loans in agriculture from the point of view of current and old overdues, extent of willful default and the reasons for non-repayment. The study revealed that the better class of farms were responsible for a large proportion of overdues and about 90 per cent of them were willful defaulters. The old overdues constituted about 71 per cent and needs serious concern.

Harikumar (1991) attempted to analyse the utilisation of loans, overdues and factors affecting the beneficiaries of a

Regional Rural Bank in Balusery Block of Kozhikode District. The results showed that the socio-economic factors were not influencing the repayment of loans. Most important factors influencing default of loan were crop failure and fall in price of products. On the other hand prompt repayment of loans guarantees further credit facility by the bank and this was the most important factor affecting prompt repayment.

Dharmpalan (1992) for a better recovery of loans, the another suggested three stage recovery drive in which about 50 per cent of the amount could be collected if credit was delivered properly and good guidance is given at the time of lending. Another 25 per cent could be collected by advising the farmers when to sell their produce and remaining 25 per cent by personal contacts and legal action. This strategy has been successful in Primary Co-operative Agricultural and Rural Development Banks.

Sankaraiah and Reddy (1994) studied the trends in recovery efficiency of the Rayal Seema Grameena Bank in Andra Pradesh. The results revealed that the recovery rate was good in the case of short term loans, priority sector advances and rural industries. Out of the activities financed, the recovery

was encouraging in piggery. By and large, recoveries were poor in poverty alleviation programmes and a declining trend was seen for the bank as a whole.

Singh et al. (1994) found that the percentage of defaulters was more in Regional Rural Banks and lower for cooperatives in Uttar Pradesh. The reasons for default were untimely rainfall and poor yields.

2.5 Performance of Regional Rural Banks

Wadhava (1980) studied the working of two RBB's namely Haryana Kshetriya Gramina Bank and the Jaipur Nagaur Aanshalik Grameena Bank. He indicated that RRB's could play a very useful role in filling the credit gap existing within the institutional structure of rural credit. The RBB's performed the task of meeting the credit needs of the small and the marginal farmers who failed to get credit from the existing cooperative credit institutions and the rural branches of the commercial Banks. He suggested the need of re-organisation and revitalisation by the policy makers to achieve the objectives.

Joshi (1982) accomplished that increase in the number of RRB's had not been accompanied by corresponding improvement of their financial viability. The supervision and monitoring of credit were lacking and there was every possibility of domination by affluents. He suggested that banking activities should be carriedout in a wider contest as friend, philosopher and guide of the rural people in the process of rural welfare.

Mehta (1984) studied the Jhabua-Dhar Kshetriya Grameena Bank of Madya Pradesh and found that the branch expansion in the beginning was slow due to lack of sufficient staff. Bank had introduced the performance budget in which the targets and achievements of deposits were compared each year, then a corporate plan for the bank was prepared. The chairman and other deputed staff members used to control the banking operations in the existing organisational pattern. The profitability of the bank was affected by higher expenses over the income and thus the bank branches were not earning profits. Cheaper funds and advances to non-target groups may improve the income position of the bank.

Noorbasha and Dakshinamurthy (1984) analysed the progress achieved by RRB's with respect to branch expansion in

rural areas compared to commercial banks. Many committees recommended that RRB's were the best agencies suited for rural development. There were some loopholes like improper appraisal of credit proposals, advances to ineligible borrowers, no pre-sanction inspection, incomplete documents, etc. The Kamath committee opined that Regional Rural Banks have to become core of rural credit base and integral part of rural credit structure as suggested by the Dantawala committee. RRB's have therefore come out as the rural development banks within a short period. Their further growth, efficiency and usefulness to target groups will depend not only on the loyalty and sincerity of the bank staff but also on the committed spirit of the state.

Ramesh and Thakur (1984) examined the sources of funds of RRB's and their effective management for viability. The scope of cross subsidisation has to be examined to provide RRB's the profit. The investment on fixed assets which donot fetch any return should be at base minimum. To conclude in respect of deployment of their resources, RRB's should keep in view profitability along with socio-economic objectives which lead to their establishment. This being an ongoing process, constant feed back, review and monitoring at various levels of

the organisation will go a long way in achieving the desired results to a great extent.

Satya Sundaram (1984) analysed the progress, probelms and perspectives of RRB's. The performance of RRB's in terms of branch expansion, deposit mobilisation and credit disbursement was impressive during 1982-83. The RRB's continued to face the problems like mounting overdues, declining profitability, lack of central control by sponsor bank, exodus of trained staff from RRB's, absence of manpower planning, lack of planning and concentration in few activities. To strengthen the RRB's adequate support from Government, effective finance by sponsor bank, a meaningful relation with cooperative system, local participation, training of staff, introduction of credit card, simplification of loaning procedure, etc., were suggested.

Sudhakar et al. (1984) evaluated the performance of Cauvery Grameena Bank of Mysore district in comparison with primary Agricultural Co-operative Societies. The performance of RRB was better than PACS with respect to deposit mobilisation, credit deployment, timely sanction of loan and adequacy of loan amount. The RRB branches were earning profit

where as PAC's were running on no loss no profit basis. This clearly shows the viability of RRB's and recommended to expand the branches in other areas.

Sahaya and Sharma (1986) in their study on Functioning of the Regional Rural Banks of India, found that the number of Regional Rural Banks, branches, deposits, advances and over dues showed an increasing trend between 1980-84, while the credit deposit ratio remained almost same. In order to bring viability; increase in income and reduction of expenditure, group lending, preparation of potential projects and each branch should have at least Rs. 20 lakh advances were some suggestions.

Dongre (1986) opined that the regional rural banks registered a tremendous branch expansion, enormous deposit mobilisation and excellent credit deployment. This success may not lead the sponsoring agencies to fix over ambitions targets and thus lose credibility of these banks. The present tempo of their branch expansion has also to be slowed down as these amy create problems of management and coordination. Lending of funds to agriculture and industry on equal footing and training of staff were the suggestions.

Devendra Babu (1988) analysed the progress of RRB's in India between 1980 and 1986. He found that Regional Rural Banks made rapid strides in the rural areas in regard to branch expansion, coverage and service. But the performance was not satisfactory due to mounting overdues. These institutions were considered as economically non-viable institutions. Strengthening capital base, general recruitment, involvement of technical personnel and DIR advances were some suggestions.

Parmar et al. (1988) while assessing the performance of Mehsana Grameena Bank in Gujarat state found that the outstanding advances increased from Rs. 1.57 lakhs in 1981 to Rs. 544.37 lakh in 1986. This was a positive consideration for the bank since it serves the main objectives of Regional Rural Banks to cater to the needs of rural people. The break up showed that the percentage share of allied activities (i.e., for dairying, poultry, gobar gas, etc.,) ranked first. The share of crop loan showed an increasing trend and reached 6.27 per cent of total outstanding loan by the end of 1986. The increasing trend of crop loan was a good sign for the development of banking sector since it was a seasonal loan which could be collected in short period and the rate of interest to be charged on such loan was also higher.

Savaraiah and Nirmalamani (1988) analysed the performance of Chaitanya Grameena Bank in Andhra Pradesh covering the period 1983-86. The number of branches, deposits, advances per bank and advances per capita were found to be in an increasing trend. In the case of sectoral deployment of credit, agriculture received a lion share especially crop loan which accounted for 80 per cent. The number of accounts had increased and on the contrary the amount advanced shown a declining trend. So far as the recovery, the bank was in a good position with 84 per cent recovery. The bank has suffered losses due to higher establishment charges and thin margin of profit. But it has succeeded in catering to the credit needs of rural masses especially the weaker sections.

Sundara Rao and Patnaik (1988) evaluated Sri. Visakha Grameena Bank during the period 1976-1985. The indicators considered were branch expansion, growth in deposits, growth in advances, recovery position, C-D ratio and net profits. All indicators except recovery percentage and net profits shown a positive trend. The recovery percentage has declined due to the drought conditions. The recovery percentage was more in agricultural sector compared to non-agricultural sector. The profit has been declining over the years due to increase in

rate of interest on deposits, staff expenses, opening of new branches, etc.

Krishnan and Balakrishnan (1989) assessed the temporal variation of dairy financing by the South Malbar Grameena Bank and found that there was tremendous increase in the disbursement of loan to agricultural and allied activities in general and to dairy farming in particular. They also reported that 80 per cent of the loanees felt that the amount was inadequate and only 20 per cent indicated that the amount was adequate. The respondents opined that an increase in the amount to Rs. 4500 from existing level of Rs. 3000 was needed. Repayment period was found to be adequate by most of the respondents, other problems faced were non availability of veterinary facility, absence of marketing facility and low price of milk.

Kuchhadiya and Shiyani (1989) intended to evaluate the performance of RRB's with special reference to the advances granted under IRDP and DRI schemes. They found that RRB had financed more than 80 per cent of the borrowers under IRDP and more then three per cent under Differential Rate of Interest loans, which were higher than the national average.

Sangwan (1989) attempted to identify the factors affecting viability with special reference to Regional Rural Banks in Uttar Pradesh. It was found that the profit making Regional Rural Banks preferred to invest more of their funds (76.03 per cent to deposits) at call and short notice rather than loans and advances to weaker sections which implies lack of profit incentive in rural lending. Interestingly overdues were not affected the book profit as the same were higher for profit making Regional Rural Banks (27.46 per cent) compared to loss making Regional Rural Banks (25.6 per cent). The C-D ratios were 74.31 per cent and 82.64 per cent for profit making and loss incurring Regional Rural Banks respectively. The author suggested an alternative model for a brach taking in to consideration the deposits with sponsor banks and lending rates on advances.

Shete and Karkal (1989) in their study on Regional Rural Banks, problems and perspectives of rural credit analysed the genesis, dispersion, performance, advances, deposits, income and expenditure and profitability aspects relating to Regional Rural Banks. The study revealed that there was increasing trend in branches (44.6 per cent), credit-deposit ratio 96.8 per cent. Number of Regional Rural Banks in profit

were 45 out of 196 in the year 1987. They also analysed the profitability differences among different Regional Rural Banks and found that profit making Regional Rural Banks had higher amounts with sponsor banks than the loss making Regional Rural Banks.

Yeshwant (1989) analysed the performance of South Malbar Grameena Bank in Kerala between 1983-87, and found that the bank has progressed very well in terms of physical and financial aspects. Deposits increased by 159 per cent, advances by 132 per cent, working capital by 138 per cent and profit by 183 per cent. The author observed that the recovery percentage was satisfactory (77.5 per cent), and the non-agricultural sector has more recovery (80 per cent) than agricultural sector (75.20 per cent). The bank was financing for one cow as against two cows, due to absence of proper marketing facilities. This has made uneconomic unit of financing.

Abdul and Jyoti (1990) studied the funds management by Chaitanya Grameena Bank in Andhra Pradesh and observed the discrepancy between number of loans granted and the interest received led to a decline in the yield rate on advances. This

varied between sectors, since the interest charged in proportion to advances was low in short term loans fluctuated in agriculture and allied activities and was disproportionately high in industrial services and business.

Jagat Ram (1990) concluded that, Regional Rural Banks have played a very vital role in rejuvenating rural economy despite several odds. They have exhibited their inherent strength of being an institution for small men nevertheless certain negative aspects like low recovery and financial viability are causes for concern. The structural/strategic policy changes are called for to correct the imbalances in their functions so as to make them more stronger.

Krishnan (1990) analysed the progress of Regional Rural Banks in India from 1975 to 1988 and found that these banks have kept up the pace in branch expansion a 32 fold increase in the coverage of districts from 12 to 365, deposits Rs.20 lakhs to Rs.245591 lakhs, advances Rs.10 lakhs to Rs.242864 lakhs, ever since the beginning. The credit deposit ratio was also commendable (99 per cent). Baring the overdue problem (51 per cent), the Regional Rural Banks have succeeded in taking the banking services to the doorsteps of rural masses to a great extent.

Singha (1990) pleaded for the restructuring of Regional Rural Banks as they could not bring about desired results since their inception and there has been many weaknesses, organisational, managerial and financial in the system, but at the same time the very fact has to be advocated that Regional Rural Banks have made their presence felt among the rural people. The reorganisation of these banks would pave the way for sustainability and serve the rural masses in a sophisticated and efficient manner.

Arunarao et al. (1991) in their study on a methodology to measure the efficiency of business organisations attempted to classify the twenty selected Co-operative Service Societies in Dakshina Kannada district through scaling technique. The data on important variables namely share capital, total business, purchases, business per member, borrowings and membership per society were collected and analysed. The first four variables were found to significantly differ between good and poor societies. Five societies were classified as poor with percentile score of 35.07, whereas another nine societies classified as satisfactory with the score of 46.74 and remaining fix societies with the score of 86.30 were grouped as good societies. The authors concluded

that the methodology was powerful enough to measure the efficiency of institutions.

Bhaskar *et al*. (1991) evaluated the functioning of Regional Rural Banks between 1976 to 1987 in India. The number of banks had increased from 40 to 196 and the branches from 548 to 13,353 between 1976 to 1987 respectively. The deposits registered a six fold increase and at the same time the advance also registered a faster growth, especially to agricultural sector. Profitability of Regional Rural Banks has been found continuously decreasing due to overdues and more than 50 per cent of share capital was eroded as only 23 per cent of Regional Rural Banks were earning profit. Higher risks, higher incidence of bad debts and poor recovery were some reasons for lower level of profitability and performance of these banks.

Sinha (1991) highlighted the importance of funds management in Regional Rural Banks in accordance with the set national priorities which leave little scope for applying elastic terms to the funds on the basis of rational priorities dicteded by the models of funds Management. The Regional Rural Banks advised to maintain not more than 1.5 per cent cash on hand CRR of three per cent and SLR of 25 per cent. The

Regional Rural Banks could mobilise higher deposits by offering extra margin of interest, availing maximum refinance, investment in approved securities, reduction in non productive assets and improving recovery position were some suggestions.

Khusro (1992) was of the opinion that the Regional Rural Banks have developed a serious organisational problems. The critical areas relate to steep decline in profitability, poor recoveries and problem relating to management and staff. The major factors responsible for erosion of profitability were exclusively lending to weaker sections, low interest margins and high operating costs. The financial cost and transaction costs were Rs. 7.80 and Rs. 8.65 respectively necessitated the Regional Rural Banks to lend funds at Rs.16.45 per cent to achieve break even level and this is obviously not possible. The recovery of Regional Rural Banks was 49 per cent as on June 1986. The author proposed for merger of Regional Rural Banks with their sponsor banks.

Narasimhan (1992) opined that to impart viability to Regional Rural Banks operations they may be permitted to engage in all types of banking business. The Regional Rural Banks may be permitted to invest the funds in NABARD or other agency to

get more interest for augmentation of income of Regional Rural Banks. The author however leave the option open to the Regional Rural Banks and their sponsor banks as to whether the Regional Rural Banks should retain their identity or whether they should be merged on a voluntary basis with sponsor banks.

Bhattacharya (1994) studied the growth and financial viability of Mayurakshi Grameena Bank. The results revealed that the deposits declined from 42.92 per cent to 15.90 per cent from 1989 to 1993. The income declined from 10.09 per cent to 7.71 per cent whereas the expenditure increased from 6.21 per cent to 9.10 per cent during the same period leading to losses.

Rangarajan (1994) analysed the non bank financial institutions in the light of liberatisation and privatisation. Efficient financial intermediation thus has been recognised as an important factor contributing both to stabilisation and economic development. The compulsion to cut costs, improve productivity and show better profitability will have to become the mission of the financial system in the coming years. He cautioned the banking institutions to be prepared for facing the competition from private banks in the years to come.

Satyanarayan (1994) analysed the capital adequacy position of all the public sector banks and a sample of 14 private sector banks. The risk weighted assets were calculated by assuming different percentage of risks for each type of asset. The results revealed that the public sector banks have achieved the capital adequacy norm of four per cent one year earlier than the time prescribed by RBI. The private sector banks and SBI group have not achieved this norm even though their profitability levels were higher.

Shiyani and Patel (1994) evaluated the physical and financial indicators in relation to the functioning of Banaskantha Mehsana Grameena Bank in Gujrat state. Linear growth rates of different attributes were computed for the overall period and found highly significant. The losses found to be increasing and could be reduced by proper cash management, minimising less remunerative fixed assets and increasing the proportion of savings deposits which carry lower rate of interest. Physical and financial indicators per branch as well as per employee increased at a faster rate in the period of development compared to the period of establishment.

Sinha et al. (1994) analysed the pattern of income,

expenditure, profit or loss and break-even levels for deposits and loan business of Central Co-operative Bank and RRB. The results revealed that the income and expenditure of Central Co-operative Bank were higher than the RRB, but the establishment expenses were higher in the case of RRB due to deputation of higher salaried staff from sponsoring bank. The Co-operative Bank earned profits throughout the period even though the trend was declining, where as the RRB incurred losses during the same period. Break even analysis indicated that the Co-operative Bank was operating above the break-even level where as RRB was operating below the break-even level.

2.6 Impact of Regional Rural Banks

Mohana Rao (1980) assessed the impact of Sri Visakha Grameena Bank on distribution of gains, cropping pattern and asset position of beneficiaries in irrigated and unirrigated areas. The main findings of the study were, cent per cent loan utilisation in irrigated region compared to dry region (98 per cent) and was mainly due to efficient bank supervision. In the case of rate of returns, it was higher in irrigated region that too in proportion to the asset possession of the beneficiaries. The rate of return was higher when the loan was advanced in the form of asset compared to cash. The cropping intensity has

increased in both the regions. The acquisition of assets was found to be higher in dry region compared to irrigated area. The artisans and traders categories registered a higher rate of asset acquisition, since the loan itself was given in the form of assets.

Naidu and Naidu (1988) evaluated the impact of Rayalseema Grameena Bank on income, profits and employment in different categories of beneficiaries. The income has increased to the extent of Rs. 153, Rs. 96 and Rs. 140 for paddy, jowar and groundnut crops between pre-loan and post loan periods. Same trend was observed in the case of dyeing and weaving in which the income was more in the latter case due to good market. The increase in mandays of employment was 40, 36.84 and 28.57 per cent for small, marginal farmers and land less labourers respectively. The increase was less in the case of agricultural labourers as they can't afford to employ outside labourers.

Patnaik and Sundara Rao (1989) examined the impact of Sri Visaka Grameena Bank finance on investment, income, employment and consumption of beneficiary households. The results indicated that there was an increase of 24 per cent in

investment observed in the case of urban area and least was in rural area. The increase in employment was more in rural areas and least in urban area. The consumption expenditure on food items has shown a negative trend in the case of semi urban and urban areas, however the overall expenditure has shown an increasing trend.

Balishter et al. (1990) evaluated the impact of Jamuna Grameena Bank on borrowing households in Uttar Pradesh. The results indicated that there was change in cropping pattern from low value to high value crops, increase in yields and input use pattern. The income levels, investments and employment also showed a positive growth between pre and post loan period in small and marginal farmers as well as land less labourers.

Dharma Rao (1991) in his study analysed the impact of Sri Visakha Grameena Bank finance on non-farm sector covering namely small business activity, transport and artisan activity in selected districts of Andhra Pradesh. He found that the level of investment, income and consumption expenditure have shown a marked change but the level of increase in employment and assets possession were relatively

lower.

Kadian and Kaushik (1993) evaluated the impact of Regional Rural Banks finance on consumption, income and employment pattern of households in Kurukshetra district of Haryana. The increase in income and family expenses was highly significant on all the categories of beneficiaries. While the income had increased more in the case of small farmers, followed by marginal farmers, rural artisans and landless labourers. The same pattern was also observed in the case of family expenses. The landless labourers had utilised relatively higher proportion of their income for consumption purposes followed by rural artisans, marginal farmers and small farmers in accordance with Englel's law of consumption in which lower income groups spend more on consumption. Employment generation was more in landless labourers followed by artisans.

Dixit et al. (1994) analysed the impact of RRB's finance on cropping pattern, income and employment of borrowers in eastern Uttar Pradesh. The results indicated that there was increase in income and employment either through adoption of new business or through expansion of/improvement of the existing business. Increase in income and employment was

relatively higher in non-agricultural activities (53.88 per cent) compared to agricultural activities (15.49 per cent). Similarly the employment generated was also higher in non-agricultural activities (30.50 per cent) compared to agricultural activities. Thus the authors recommended for more investments in non-agricultural sector for supporting agribusiness and creating a permanent source of income.

CHAPTER - III

METHODOLOGY

III. METHODOLOGY

This chapter deals with the description of the study area, salient features of the organisation, the sampling technique employed, the nature and sources of data and the various tools and techniques employed in analysing the data and evaluating the results. At the end of the chapter a few concepts are defined and explained to facilitate a clear understanding of the issues with which the present study is concerned.

The methodology is presented under the following major heads.

3.1 Profile of the study area

3.2 Sampling procedure

3.3 Nature and Sources of Data

3.4 Analytical techniques employed

3.5 Concepts used in the study

3.1 Profile of the study area

The operational area of Malaprabha Grameena Bank consisted of the entire revenue districts of Belgaum and Dharwad in Karnataka state (Fig. 3.1) with 86 and 122 branches respectively. These districts are adjoining to each other to facilitate ease in the administration and monitoring the banking activities in the operational area. The study of the

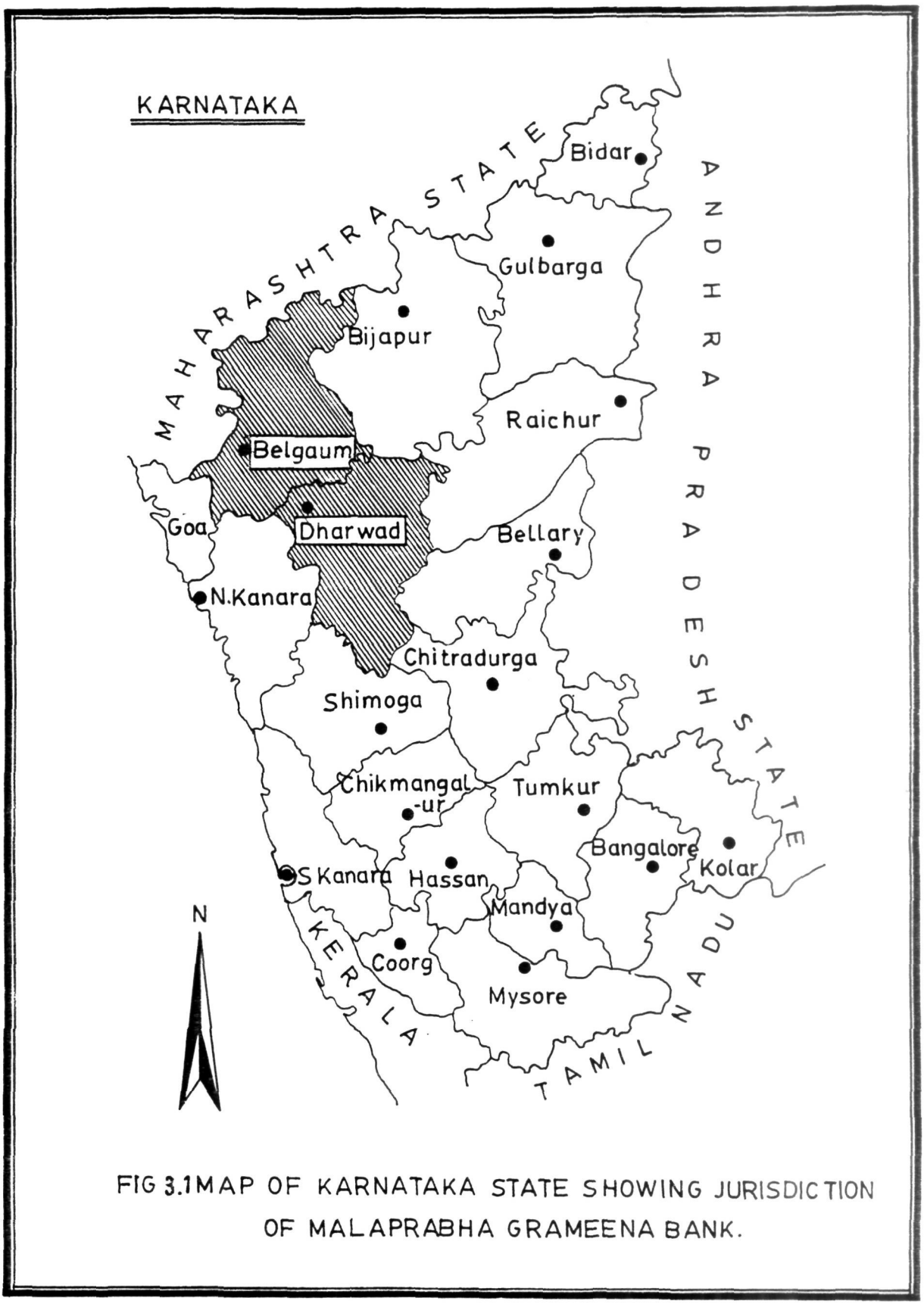

FIG 3.1 MAP OF KARNATAKA STATE SHOWING JURISDICTION OF MALAPRABHA GRAMEENA BANK.

profile of the operational area would provide an idea of the agro-economic development, infrastructure facilities and the potential available for further development.

3.1.1 Location

Belgaum district falls in the northern part of the Karnataka state. The district is surrounded by Goa and part of Kolhapur and Ratnagiri districts of Maharashtra state in the West, Dharwad and North Canara districts in the South, Bijapur district in the East and Kolhapur district in North. The district is divided into two regions viz., the Transitional belt and the Deccan platue. The district is drained by rivers the Krishna, the Malaprabha and the Ghataprabha and their tributaries.

Bailhongal taluka falls in the Southern part of Belgaum district (Fig 3.2). It is surrounded by Belgaum taluka in the West, Soundatti taluka in the east, Dharwad district in the south and Gokak taluka in the north.

Dharwad district has the largest number of taluks (17) in the state. It is situated in the western sector of northern part of the Karnataka state. It is bounded in the north by Belgaum and Bijapur districts, Raichur and Bellary in the east, Chitradurga and Shimoga districts in South and Uttar Kannada district in the west. The district is divided into three belts geographically, viz., Malnad, Transition and Dry regions.

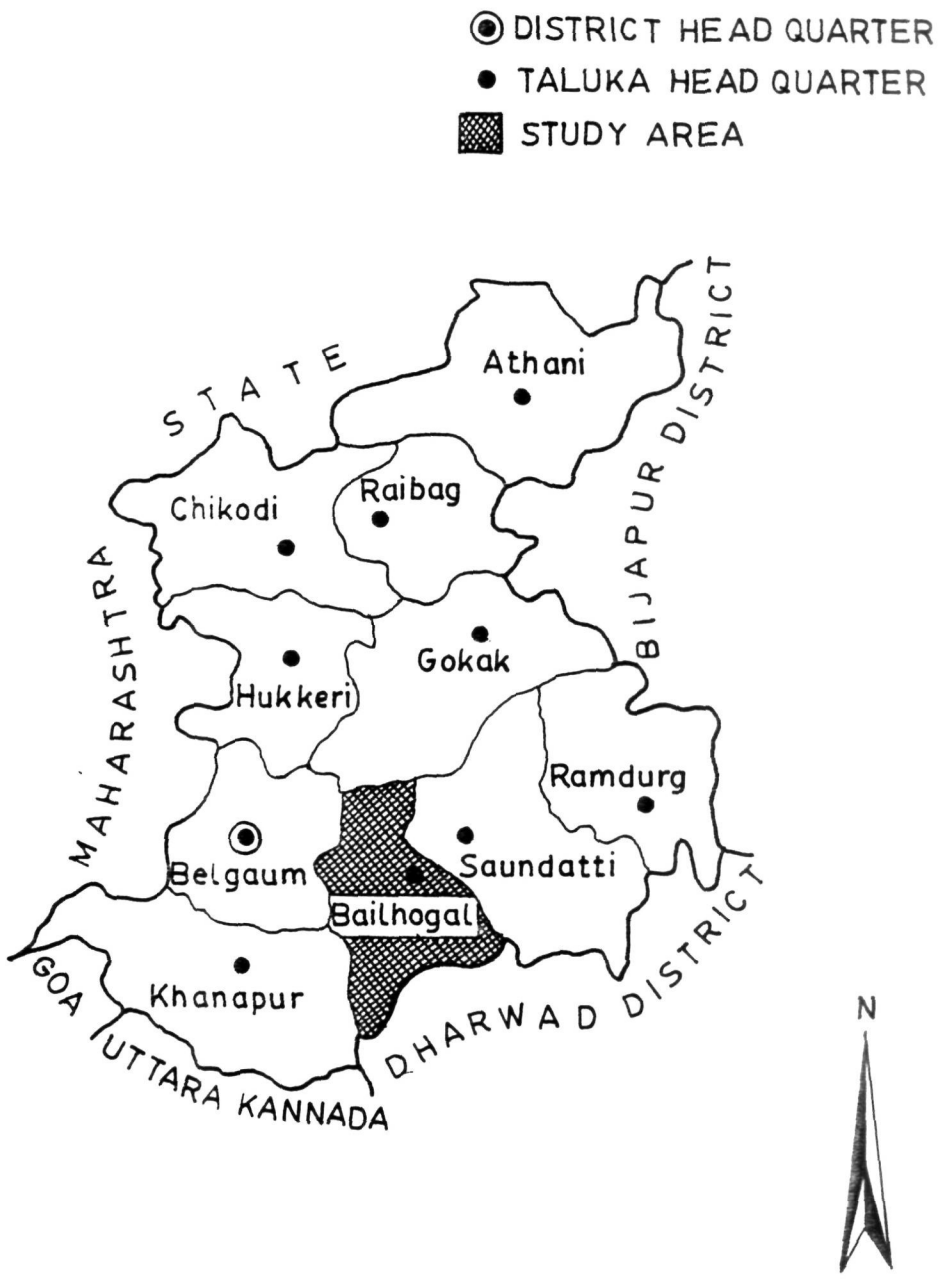

FIG:3.2-MAP OF BELGAUM DISTRICT SHOWING THE STUDYAREA

Tungabhadra and Malaprabha are the two major rivers of this district.

Navalgund taluka falls in the northern part of Dharwad district(Fig 3.3). It is surrounded by Naragund taluka in the north, Gadag taluka in the east, Dharwad taluk in the west and part of Kundagol taluka in the south.

3.1.2 Geographic and Demographic features

Belgaum district has an area of 13,415 sq. km and Bailhongal taluka has an area of 1122 sq. km. Total population of the district as per 1991 census was 35, 21,400 and that of Bailhongal taluka was 1,12,200. The density of population comes to about 222 to 230 in Belgaum district and Bailhongal taluka respectively.

Dharwad district has an area of 13,73,800 sq. kms and Navalgund taluka has an area of 1,08,000 sq. kms. The total population of Dharwad district as per 1991 census was 34,99,100 and that of Navalgund taluka was 1,61,300. The density of population in Dharwad district was 255 per sq.km. as against in Navalgund taluka it was 149 persons per square kilometer (Table 3.1).

3.1.3 Soils

Soils in both the districts comprise of red, medium black and deep black soils. Similar types of soils were found

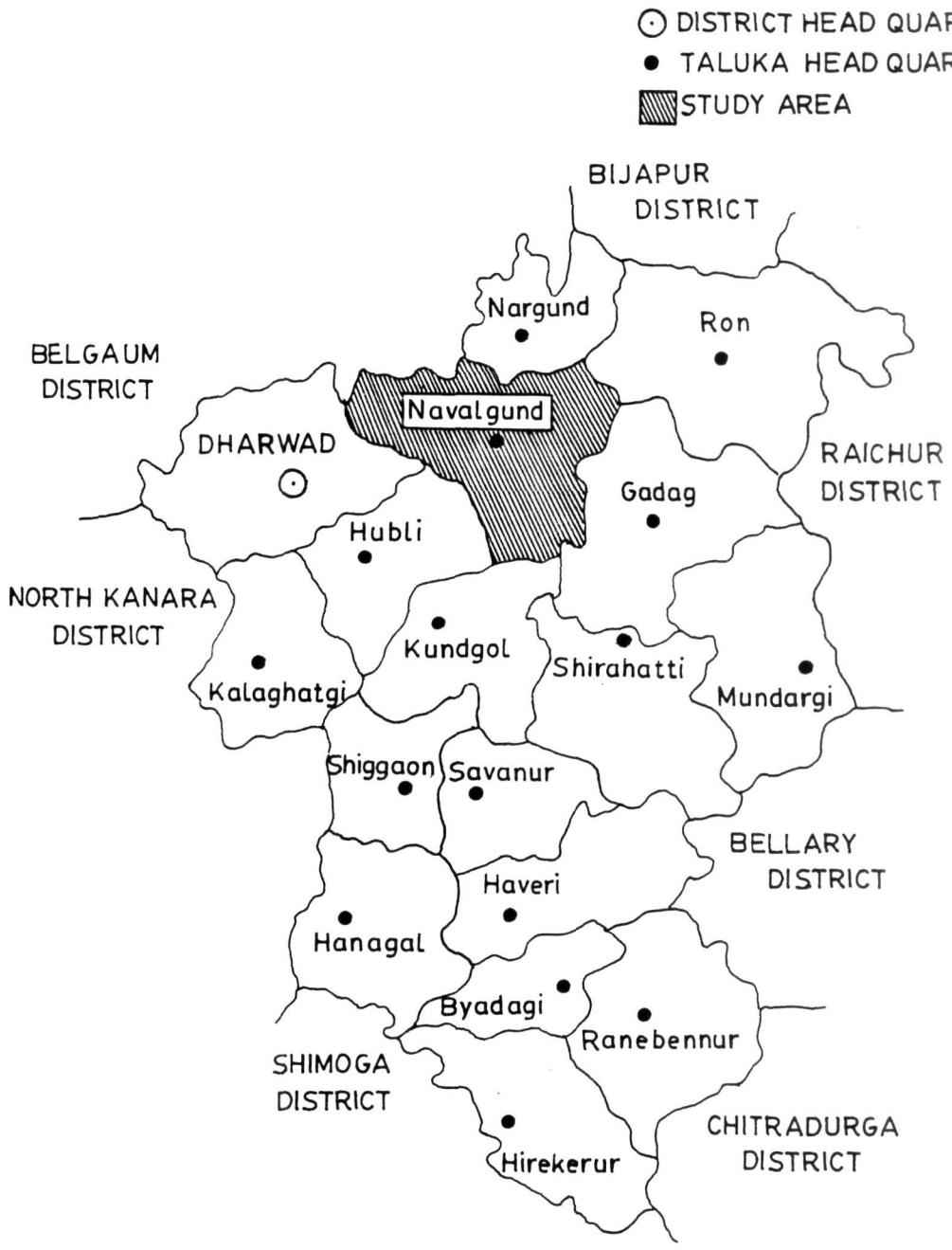

FIG:3.3-MAP OF DHARWAD DISTRICT SHOWING THE STUDY AREA.

Table 3.1. Salient Features of the Study Area and Sample Taluks (1991-92)

Sl. No.	Particulars	Belgaum District	Bailhongal Taluk	Dharwad District	Navalagund Taluk
1.	Geographical area (Sq.kms)	13415	1122	13738	1080
2.	No. of Inhabitated villages	1142	124	1322	58
3.	Total population in 00's (1991 census)	35214	3100	34991	1613
4.	Rural population	26807	2761	22762	1167
5.	Urban population	8407	339	12329	447
6.	Male population	17972	1567	17992	827
7.	Female population	17242	1533	16999	787
8.	Population density	222	230	255	149
9.	Normal rainfall (mm)	808	706	717	612
10.	Actual rainfall (mm)	965	887	908	737

Source : Belgaum District at a Glance, 1991-92,
District Statistical Office, Belgaum,
Dharwad District at a Glance, 1991-92,
District Statistical Office, Dharwad

in Bailhongal and Navalgund taluks. The major soil in both the districts is deep black soil which is is moderately rich in plant nutrients.

3.1.4 Rainfall

The south west monsoon is the most crucial for both of the districts. Belgaum district has a normal rainfall of 808 mm where as Bailhongal taluka has 706 mm. The actual rainfall received by Belgaum district was 965 mm and 887 mm in Bailhongal taluka.

3.1.5 Land utilisation pattern

The land utilisation pattern of Belgaum and Dharwad districts ware presented in the Table 3.2. The net sown area of Belgaum district came to 8,97,000 ha and that of Bailhongal taluka 91,210 ha. The area under forests was 1,90,000 ha and 7,913 ha for Belgaum district and Bailhongal taluka respectively. The fallow land which accounted to 1,06,000 ha was found in Belgaum district and all land was put to use in Bailhongal taluka. The land not available for cultivation was 1,12,000 ha and 11,649 ha for the Belgaum district and Bailhongal taluka in that order.

Similarly the net sown area of Dharwad district came to 9,72,000 ha and that of Navalgund taluka was 80,700 ha. Area under forests in Dharwad district was 1,15,000 ha and no forest

Table 3.2. Land Utilisation Pattern in the Study Area and Sample Taluks (1991-92)

Sl. No.	Particulars	Belgaum District (000 ha)	Bailhongal Taluk (ha)		Dharwad District (000 ha)	Navalagund Taluk (ha)	
I.	Area under forests	190	7913	(4.16)	115	-	-
II.	Land not available for cultivation						
	i) Non-agricultural uses	68	7528	(11.07)	61	2671	(4.38)
	ii) Barren land	44	4121	(9.66)	22	647	(2.94)
	Total	112	11649	(10.40)	83	3318	(4.00)
III.	Other uncultivated land						
	i) Cultivable waste	13	-	-	7	61	(0.87)
	ii) Parmanent pastures	25	1426	(5.70)	19	5	(0.03)
	iii) Trees and groves	1	35	(3.50)	2	3	(0.15)
	Total	39	1461	(3.75)	28	69	(0.25)
IV.	Fallow land						
	i) Current fallow	97	-	-	169	24131	(14.28)
	ii) Other fallows	9	-	-	11	-	-
	Total	106	-	-	180	24131	(13.41)
V.	Net sown area	897	91210	(10.17)	972	80700	(8.30)
VI.	Geographical area	1344	112233	(8.35)	1378	108218	(7.85)

Note : Figures in the parantheses indicate percentage to the district area.

cover was seen in Navalgund taluka. The fallow land accounted for 1,80,000 ha in Dharwad district and that of Navalgund 24,131 ha. About 83,000 ha and 3,318 ha of land was found to be not available for cultivation in Dharwad district and Navalgund taluka respectively.

3.1.6 Cropping Pattern

The area devoted for different crops in the selected districts and taluks are presented in the Table 3.3. The major crops of both the Belgaum district and Bailhongal taluka were jowar, paddy, wheat among cereals, Bengalgram and Redgram under pulses and among commercial crops, sugarcane, groundnut and cotton were important. Similar crops occupied the prime importance in the cropping pattern of Dharwad district and Navalgund taluka, but ragi and sugarcane were not grown in Navalgund taluka.

3.1.7 Area Irrigated by different sources

The area irrigated by different sources in Belgaum and Dharwad districts were presented in the Table 3.4. Canals and wells formed the major sources of irrigation in both of the districts. The canal irrigation was not seen in Bailhongal taluka where as all sources were seen in Navalgund taluka.

The total irrigated area came to 2,64,800 ha and 15,830 ha for Belgaum district and Bailhongal taluka respectively.

Table 3.3. Cropping Pattern in the Study Area and Sample Taluks (1991-92)

(Area in 000 ha)

Sl. No.	Particulars	Belgaum District	Bailhongal Taluk	% to district	Dharwad District	Navalagund Taluk	% to district
	I. Cereals						
	Paddy	57.83	4.98	8.61	85.73	0.44	0.51
	Ragi	3.13	0.02	0.64	11.18	-	-
	Jowar	236.10	18.52	7.84	278.02	26.97	9.70
	Bajra	8.06	0.02	0.25	2.03	0.03	1.48
	Wheat	38.90	2.60	6.68	75.75	23.12	30.52
	Other cereals	61.06	4.34	7.11	64.02	5.75	8.98
	Total	405.08	30.47	7.52	516.73	56.30	10.90
	II. Pulses						
	Bengalgram	22.10	2.68	12.13	45.64	9.33	20.44
	Redgram	11.53	1.44	12.49	25.02	1.17	4.68
	Other pulses	55.70	4.50	8.08	146.48	18.21	12.43
	Total	89.33	8.61	9.64	212.13	28.72	13.54
	III. Commercial Crops						
	Groundnut	107.10	9.10	8.50	159.49	12.72	7.98
	Sugarcane	107.24	8.37	7.80	3.89	-	-
	Cotton	77.20	29.02	37.59	197.62	19.11	9.67
	Total	291.54	46.48	15.94	360.99	31.83	8.82
	IV. All Crops	785.95	85.56	10.89	1089.86	116.85	10.72

Table 3.4. Area Irrigated by Different Sources (1991-92)

Sl. No.	Particulars	Belgaum District (00ha)	Bailhongal Taluk (ha)	Dharwad District (00ha)	Navalagund Taluk (ha)
1.	Canals	805	-	562	15326 (27.27)
2.	Tanks	38	1010 (26.58)	161	-
3.	Wells	686	1200 (1.75)	185	1784 (9.64)
4.	Borewells	282	10925 (38.74)	278	-
5.	Other sources	837	2695 (3.22)	254	5503 (21.67)
6.	Total	2648	15830 (5.98)	1440	22613 (15.70)

Note : Figures in the parentheses indicate percentage to the district area

Similarly in Dharwad district and Navalgund taluka it was 1,44,000 ha and 22,613 ha respectively.

3.1.8 Infrastructure facilities

The districts as well as the taluks under consideration were having a good network of roads, communication facilities, storage facilities, markets, etc.

3.1.9 Dairy and Poultry

Both the dairy and poultry occupy important place in agrarian economy, as these activities are considered as major source of subsidiary income. The total livestock population of Belgaum district and Bailhongal taluka came to 20,48,600 and 1,51,200 of which the poultry population in the district and taluka had been 6,95,200 and 51,100 respectively. In the case of Dharwad district and Navalgund taluka, the livestock population was 16,29,700 and 86,700 respectively. The poultry population came to 6,37,300 and 11,900 for the district and taluka respectively. The veterinary facilities have been spread over in both of the districts.

3.1.10 Industries

There were 504 different types of industries working in Belgaum district of which 24 in Bailhongal taluka. In the case of Dharwad district 648 industries were working and in Navalgund taluka the total number of industries were 21. These

industries comprise of textiles, chemical, engineering and other types of industries.

3.1.11 Financial Institutions

There were 196 Regional Rural Banks (RRB's) functioning in the country as at the end of March 1994. 13 RRB's were functioning in Karnataka State. Institutional frame in the study area has been shown in the Table 3.5.

3.2 Sampling Procedure

A multistage stratified random sampling procedure was adopted to select samples for evaluating the objectives of the study. Malaprabha Grameena Bank was purposively selected for an indepth study to gain insight into the performance and also to identify the weaknesses both in organisation and operation of the bank so as to evolve suitable policy measures for strengthening the Grameena Banks in the country. At the next stage two talukas one from each district were selected based on the decisions of the interaction session in which the taluka selected has to represent both irrigated and dry tracts. The taluka belonging to Belgaum district was considered as dry area and on the other hand the taluka in Dharwad district was considered as irrigated area on the criterion of area under irrigation in different talukas of the district.

Table 3.5. Financial Institutions as on March 1994

(No. of Branches)

Sl. No.	Bank	Belgaum District	Dharwad District
1.	Commercial Banks	197	206
2.	Malaprabha Grameena Bank	86	122
3.	Co-operative Banks	101	102
4.	Karnataka State Finance Corporation	2	3
	Total	386	433

In the interaction session it was decided to identify good and lower performance branches in both of the districts. After a great deal of discussion and interaction with the officials and their experience in the field of banking, 141 good performance branches and 67 lower performance branches were identified in both of the districts. Similarly out of 86 branches in Belgaum district, 48 branches were identified as good performance branches and in Dharwad district 94 branches were identified as good performance branches out of the total of 122 branches in the district.

In the third stage, two branches from each taluka were selected randomly representing both the irrigated and dry areas as well as good performance and lower performance. The selection was made in consonance with the advisory committee members alongwith officials of the bank.

At the fourth stage, a list of borrowers was prepared for each branch and 40 borrowers were selected randomly out of this list, representing the category of farmers, agricultural labourers, artisans and businessmen. An exhaustive well structured and pretested schedule was used to elicit the primary data on production, credit acquisition, use, repayment, consumption and opinions from the respondents. A sample of willful and non-willful defaulters of 40 each were also drawn to identify the factors discriminating the two groups.

Besides the sample of beneficiaries, a sample of Directors and Officials of the Malaprabha Grameena Bank, Officials of other banks, were also drawn for opinion analysis. In addition, 14 branches were selected at random to measure the performance considering 20 variables relating to the period 1994.

The criteria on which the choice of branch, beneficiaries, non-officials and officials selected and included in the sample is briefly indicated below.

3.2.1 Selection of Taluks

For the purpose of selecting two taluks one each from Belgaum and Dharwad district, a list of talukas was prepared. It was decided to select one taluka coming under dry region and another taluka in irrigated region for the purpose of comparison and contrast with respect to their performance. Selection of Bailhongal taluka in Belgaum district and Navalgund taluka in Dharwad district was made in the interaction session in which the Chairman, General Manager, Senior Managers of the Malaprabha Grameena Bank, District Manager, NABARD and Advisory Committee members of the researcher were present.

3.2.2 Selection of the Branches

From each taluka, two branches were selected which had started working from atleast a period of ten years. In the

process of selection of branches, the decision arrived in the interaction session was given due consideration where in irrigated and unirrigated branches as well as good and poor performance branches should be considered for comparison and contrast and accordingly the proposed branches were selected for the study i.e., Nesaragi and Khanagaon in Bailhongal taluka, Arekurahatti and Tirlapur in Navalgund taluka. From each taluka, out of the two branches one branch was categorised as better performing branch and another was with relatively lower performance as per the experiences of the officials working in the bank. Fourteen branches were randomly selected for measuring the performance of branches based on the selected variables.

3.2.3 Selection of Beneficiaries

A complete list of the beneficiaries who borrowed loans from respective branches of Malaprabha Grameena Bank was prepared separately. A random sampling technique was adopted in selection of beneficiaries in order to provide equal opportunity to all beneficiaries.

The interaction with the officers indicated that the variation within each category of beneficiaries was far less interms of scale of finance and unit cost was conspicuous. There fore a fixed sample size was adopted.

The sample size of beneficiaries from each group was fixed at ten and for each branch it worked out to 40. In all, 160 beneficiaries were selected for the study. The details of beneficiaries selected from the respective branches of Malaprabha Grameena Bank is given in Table 3.6.

A sample 40 respondents each from the category of willful and non willful defaulters were selected randomly to identify the factors discriminating the two groups.

3.2.4 Selection of Policy Makers and Officials

Directors and officials of the Malaprabha Grameena Bank were considered for eliciting the opinions on the performance of the bank. The size of respondents considered for eliciting opinions was seven and fifty respectively.

3.2.4.1 Policy Makers

The chairman and Directors of the Malaprabha Grameena Bank comprising of representatives from RBI, NABARD, Central Government and State Government were considered as policy makers. Out of nine directors of the board of management, seven directors were selected at random, to elicit the opinions about performance and working of the bank.

3.2.4.2 Officials

A cross section of 50 officials, belonging to the Malaprabha Grameena Bank was selected at random, comprising of

Table 3.6. Details of the Beneficiaries Included in the Sample

(In numbers)

Sl. No.	Name of the Branch	Beneficiaries				
		Farmers	Agril. labourers	Artis-ans	Busin-nessmen	Total
	Belgaum District					
1.	Khanagoan	10	10	10	10	40
2.	Nesaragi	10	10	10	10	40
	Dharwad District					
1.	Arekurahatti	10	10	10	10	40
2.	Tirlapur	10	10	10	10	40
	Total	40	40	40	40	160

the top and middle management cadre as well as the supporting staff. The staff members were closely associated with the policy formulation and implementation aspects of the bank.

3.2.4.3 Selection of Officials of other Banks

Officials of other banks who were closely associated with review of the working of Grameena Banks and also actively participated in the policy framework of the bank concerning their organisation and effective working in tune with the objectives of the bank were listed. A sample of 20 officials were approached to elicit the opinions.

3.3 Nature and Sources of Data

For evaluating the objectives of the study, primary data relating to production, consumption, income, borrowings, repayments, defaults, asset possession, opinions, were elicited from the selected borrowers on the basis of a pre-tested and well structured schedule. The borrowers were personally interviewed to ensure accuracy and comprehension.

For eliciting the opinion of the respondents on the performance and working of the bank, four different types of questionnaires were used, one each for non officials, officials, other bankers and borrowers. The variables which have a close relevance to performance were identified and included in the schedule based on the discussion with the

Advisory Committee Members, besides bank officials themselves. Each selected variable was bifurcated into sub-variable and a three point continum scale was adopted to measure the scores. These questionnaires were personally canvassed and opinions were sought from the respondents during the month of August 1994.

The secondary data were also collected from the annual reports, monthly progress reports and other records of the bank on both physical and financial aspects. The period covered was 18 years from 1976 to 1994 for the study. But in case of some variables the duration had changed depending upon the availability of time series data from the records of the bank. Credit flow, for the whole bank both beneficiary wise and purposewise was analysed. To workout the share of Malaprabha Grameena Bank in dispensation of credit in the district of Belgaum and Dharwad, data were collected from the Lead Bank of respective districts, in respect of credit advanced by various financial institutions. In addition, the data relating to 14 branches, seven each from Belgaum and Dharwad districts were collected on 20 identified variables to measure the performance of the branches for the year 1993. Also a set of physical and financial variables were considered and time series data from 1976 to 1994, were collected to measure the performance of the bank and to identify the variables that had the major influence on working and performance of the bank in toto. Necessary data

were also collected at the bank level to workout the Break-even volume of business and capital adequacy of the bank. The time series data relating to overdues were also collected for analysis.

3.3.1 Period of the Study

The total period of 18 years (1976 to 1994) was divided into three sub-periods based on the two criteria viz., (1) the banks generally required at least five years for their establishment in the initial stages to attain stability, (2) the profits of the bank started after 1981. The sub period of the study are indicated in Table 3.7.

3.3.2 Identification of Variables

In order to know the variables which have a close relationship with the performance of the bank, necessitated the researcher to get the information from the records as well as in the form of opinions of the respondents.

3.3.3 Performance Indicators

About 31 variables were identified as performance indicators having close association with the performance of the bank. Out of these, 12 were considered as physical indicators and 19 as financial indicators. The physical and financial indicators of the bank have been presented in the Table 3.8 and 3.9, respectively.

Table 3.7. Sub-periods of the study of Malaprabha Grameena Bank

	Periods	Duration	Number of years
I	Establishment	1976-1980	05
II	Development	1981-1994	13
III	Overall	1976-1994	18

Table 3.8. Physical Performance Indicators of Malaprabha Grameena Bank

Indicators
Manpower
Number of branches
Families per village
Villages covered
Deposits accounts
Advance accounts
Employee per branch
Deposit accounts per branch
Advance accounts per branch
Deposit accounts per employee
Advance accounts per employee
Non-performing asset accounts

Table 3.9. Financial Performance Indicators of Malaprabha Grameena Bank

Indicators
Advances
Deposits
Business
Income
Expenses
Profit or loss
Overdues
Recovery percentage
Credit per branch
Deposit per branch
Business per branch
Credit per employee
Deposit per employee
Refinance
Participation in Govt. programmes
Share capital
Non performing assets
Credit-Deposit ratio (%)
Borrowings

3.3.4 Indicators Influencing the Working of the Bank

To get the opinions of the policy makers with respect to working of the bank, 20 variables have been identified and are listed in the Table 3.10.

Sixteen variables were identified for seeking the opinion of the officials and were listed in the table 3.11.

3.4 Analytical Techniques Employed

The data collected from primary and secondary sources were analysed in multiple stages. The data were subjected to statistical analysis through the following techniques.

1. Tabular analysis
2. Growth rate analysis
3. Ratio analysis
4. Kendall's coefficient of concordance and Gini Coefficient.
5. Principal component analysis
6. Scaling technique
7. Capital Adequacy
8. Break even analysis
9. Cluster analysis
10. Discriminant function analysis.

3.4.1 Tabular Analysis

The technique of tabular analysis was used for computing averages on the performance of physical and financial variables

Table 3.10. Variables Influencing the Performance of the Malaprabha Grameena Bank (Policy Makers)

Sl. No.	Variables
1.	Education and experience of policy makers
2.	Awareness to Government policies
3.	Decisions at the head office
4.	Adequacy of the staff
5.	Education levels of the employees
6.	Training to employees
7.	Effectiveness of training
8.	Bank management
9.	Services provided to farmers
10.	Impact of credit
11.	Supervision
12.	Communication within the bank
13.	Coordination within the bank
14.	Communication among banks
15.	Coordination among banks
16.	Performance indicators
17.	Impact indicators
18.	General problems
19.	Financial problems
20.	Miscellaneous problems

Table 3.11. Variables Influencing the Performance of the Malaprabha Grameena Bank (officials)

Sl. No.	Variables
1.	Education and experience
2.	Training
3.	Involvement
4.	Managerial capacities
5.	Supervision
6.	Execution of plans and policies
7.	Coordination within the bank
8.	Communication within bank
9.	Communication among banks
10.	Functioning of the Board
11.	Bank Management
12.	Performance indicators
13.	Impact indicators
14.	General problems
15.	Financial problems
16.	Miscellaneous problems

of the bank, flow of funds, overdues, asset position, consumption pattern, income levels, employment, capital adequacy break-even analysis and also percentages were workedout for the purpose of comparison.

3.4.2 Growth Rate Analysis

Growth Rate Analysis was undertaken with a view to study the changes in selected physical and financial variables related to Malaprabha Grameena Bank, Dharwad. The conventional growth model employed was an exponential function.

By assuming variable Y (physical or financial variable) to be increasing approximately at a constant rate of 100 percent per unit of time 't' and further assuming that the effect of disturbance was proportional to the trend value of Yt, the following equation was adopted for estimating the compound growth rate.

$$Y_t = AB^t V_t \quad \ldots\ldots\ldots \quad (1)$$

Where,

Y_t = Physical/Financial variable

A = Y in the base year

t = Time

V_t = Error term

B = 1 + g

By taking the logarithm, the above equation was reduced to the following form :

$$\text{Log } Y_t = \text{Log } A + (\text{Log } B)\ t + \text{Log } V_t \quad \ldots\ldots \quad (2)$$

Where Log A and Log B are the parameters of the function obtained by the method of Ordinary Least Square (OLS) method.

Defining,

$Qt = \text{Log } Yt$

$X_t = t$

$a = \text{Log } A$

$b = \text{Log } B$

$U_t = \text{Log } V_t$

Equation (2) could be rewritten as follows :

$$Q_t = a + bx_t + U_t \quad \ldots\ldots\ldots \quad (3)$$

With the help of the above equation, the value of 'g' was obtained as follows :

$\text{Log } B = b$

$B = \text{Antilog } b$

$B = 1 + g$

$g = B - 1$

For effective comparison, the growth rate arrived at, with the help of equation (3) was multiplied by 100 to obtain the percentage change in the variable concerned.

The important physical indicators considered for analysis of growth rate were, manpower, branches, family coverage, number of villages covered, deposit accounts, advance accounts, employee per branch, advance accounts per branch,

average deposit accounts per branch, deposit accounts per employee and advances accounts per employee. The important financial indicators were, advances, deposits, total business, income, expenditure, profit, recovery percentage, overdues, advances per branch, deposits per branch, business per branch, advances per employee, deposits per employee, refinance outstanding, participation in Government programme, non-performing assets, CD-ratio, share capital and borrowings.

For the purpose of working out the changes in the physical and financial variables over time, the entire period was divided in to three phases (i) I-period 1976 to 1980, which represents the period of establishment as quoted by many committees and researchers, (ii) II-period 1981 to 1994, denoting the period of development and (iii) Overall period 1976 to 1994.

3.4.3 Ratio Analysis

Ratios are measurements of results originated from a business. The ratio analysis is one of the most useful and common methods of analysing financial statements. Relevant financial ratios were workedout for the Malaprabha Grameena Bank.

Financial Ratio Analysis

Financial ratios are important tools in the hands of

bankers for the examination of factors like financial solvency, liquidity, profitability, efficiency and strength. This is an effective tool in measuring the performance of the bank in rural financing. The various ratios employed were as follows.

3.4.3.1 Tests of Liquidity

Liquidity ratios indicate the continuous operation of the bank. These ratios are used to measure the ability of an enterprise to possess adequate cash to meet immediate obligations.

3.4.3.1.1 Current Ratio

This ratio measures the degree of liquidity of the bank in the short term. It indicates whether the current assets are sufficient to repay the current liabilities.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

The current assets included in this study were cash on hand and with Reserve Bank of India, balance with other banks (in current account) money at call and short notice, short term advances, bills receivable and prepaid expenses.

The current liabilities include interest on deposits (savings and current account), borrowings (short term from NABARD and sponsoring bank), and bills payable.

A very high current ratio is not desirable as it would mean less efficient use of funds. Similarly a low current ratio would mean too much of strain on working capital resources. It is generally believed that a good current ratio should be between 1.5:1 and 2:1. Generally higher the value of this ratio, better would be the margin and financial solvency of the bank.

3.4.3.1.2 Credit-Deposit Ratio

This ratio indicates the extent of utilisation of resources by the bank. This measure acts as an indirect means of assessing the monetary management by the bank. In the present study, the ratio was estimated as follows :

$$\text{Credit Deposit Ratio (Per cent)} = \frac{\text{Advances outstanding}}{\text{Deposits outstanding}} \times 100$$

3.4.3.1.3 Liquid Assets to Total Assets Ratio

This ratio was used to show the degree of liquidity preference adopted by the bank and was computed as follows.

$$\frac{\text{Liquid Assets}}{\text{Total Assets}}$$

The liquid assets include, cash in hand, cash at banks and short term deposits. Total assets include cash and balances, balance with banks, investments, advances, fixed assets and other assets.

3.4.3.1.4 Acid-test Ratio

This ratio is called quick ratio or near money ratio. This represents the ratio between quick assets and quick liabilities and computed as follows :

$$\text{Acid Test Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

The quick assets include cash in hand, cash at bank and short term deposits.

The quick liabilities include bills payable, interest accrued, other provisions and interest paid.

The ratio indicates the extent to which the capital is financing the current assets which carries a low degree of liquidity.

3.4.3.2 Solvency

The long term solvency position of the bank business was assessed by these ratios. These ratios indicate owners involvement in the total resources and provides basis for measuring leverage ratio. The various ratios employed were as follows.

3.4.3.2.1 Debt-Equity Ratio (Leverage)

This ratio compares the owner's stake in the business with outside term liabilities. This ratio is also called as

leverage. Lower value of the ratio indicates that the leverage effect will be restricted to the minor role of debt and the major capital being equity, the bank is supposed to be trading on thick equity and when the ratio is high, it signifies dominant leverage effect and the major capital being the borrowed capital. The equity capital plays minor role indicating a thin equity on which the bank is functioning.

$$\text{Debt Equity Ratio} = \frac{\text{Long term Liabilities}}{\text{Net worth}}$$

In the above ratio, debt represents only long term liabilities and not current liabilities, while equity refers to networth after deducting intangible assets. Net worth includes statutory reserves, capital reserves, revenue and other reserves and share capital.

3.4.3.2.2 Indebtness Ratio

This ratio reflects the solvency position of the bank in a better way. The ratio indicates the amount owed by the bank to creditors.

$$\text{Indebtness ratio} = \frac{\text{Total Liabilities}}{\text{Net worth}}$$

In this case we take current and term outside liabilities. The lower ratio indicates a better solvency position. The total liabilities include deposits, statutory

reserves, capital reserve, revenue reserves, borrowings, other liabilities, contingent liabilities and share capital.

3.4.3.3 Tests of Strength

The following measures were used to measure the real worth of Malaprabha Grameena Bank.

3.4.3.3.1 Net Worth

It indicates what the business owes to the owners of business. It measures the excess of assets over liabilities. A positive difference of higher magnitude indicates the soundness of the bank.

Net Worth = Total Assets - Total Liabilities.

3.4.3.3.2 Net Capital Ratio

This ratio indicates the degree of liquidity of the business in the longrun. It measures the degree of availability of assets to pay off the long term liabilities.

$$\text{Net Capital Ratio} = \frac{\text{Total Assets}}{\text{Total Liabilities}}$$

Higher the net capital ratio, greater would be the margin of safety against decline in the prices of major assets of the bank. This ratio would throw light on the real financial strength of the bank.

3.4.3.4 Profitability Ratios

These ratios can be used to assess the financial status and overall efficiency of the bank. These ratios were used to compare the returns over the investments. Following were the important ratios.

3.4.3.4.1 Net Profits to Total Assets Ratio

This ratio indicates the ratio of profit on the total assets of the bank and their employment. The ratio was computed as follows.

$$\text{Net Profits to Total Asset Ratio} = \frac{\text{Net Profits}}{\text{Total Assets}}$$

An increasing trend over the years indicates the overall efficiency of the bank.

3.4.3.4.2 Net Profits to Net Worth Ratio

Net worth means present value (as shown in the balance sheet i.e., at cost less depreciation) of assets minus all liabilities. The ratio of net profit to net worth shows whether profitability is being maintained.

$$\text{Net Profit to Net Worth} = \frac{\text{Net Profit}}{\text{Net worth}}$$

A decline in the ratio should be a cause for inquiry.

3.4.3.4.3 Net Profits to Fixed Assets

The ratio indicates whether the fixed assets are being used properly. A decline in the ratio shows either that the assets are being kept idle or that business conditions are bad.

$$\text{Net Profit to Fixed Assets} = \frac{\text{Net Profits}}{\text{Fixed Assets}}$$

The lower ratio indicates that adequate depreciation was not written off so that the assets were not worth what they are stated to be. Further, it may mean that the assets were such that they may exist for a short period. The fixed asset consisted of land, building, furniture and fixtures and depreciation on assets.

3.4.3.5 Efficiency Ratios

Following two ratios were adopted to assess the efficiency of the bank and they were,

3.4.3.5.1 Gross Ratio

This ratio helps to ascertain how efficiently the gross income of the bank was utilised and the ratio was computed as follows.

$$\text{Gross Ratio} = \frac{\text{Total Expenses}}{\text{Gross Income}} \times 100$$

The total expenses included both interest expenses and non interest expenses. In the same manner, the gross income of the bank comprised of both interest income and non interest income.

3.4.3.5.2 Operating Ratio

This ratio indicates the proportion of gross income being used for meeting the operating expenses.

$$\text{Operating Ratio} = \frac{\text{Operating expenses}}{\text{Gross Income}} \times 100$$

An increase in the ratio indicates a decline in the efficiency of the bank.

3.4.3.6 Management of Spread, Burden and Profitability of Malaprabha Grameena Bank

The aim of this analysis was to know the efficiency of the bank in managing the interest spread and burden to increase the profitability and to suggest measures for improving the efficiency. The profitability analysis was made on two distinct aspects. Firstly, the profitability was calculated on the spread-burden norms as developed by the Canara Bank. Secondly, the profitability performance of the bank was also measured with the help of the key ratios derived by relating various components of profit and loss account to a common denominator, say, volume of business. The analytical framework

for profitability management has been designed with the help of the income and expenditure statement and the balance sheet of the bank.

The various components of profitability and their relationship has been shown in the Table 3.12. The spread, burden and profit of the Malaprabha Grameena Bank were calculated for a period of eighteen years from 1976 to 1994. For the purpose of checking the results of the bank, the key ratios given in Tables 3.13 and 3.14 were considered.

3.4.4 Kendall's Coefficient of Concordance

In order to identify the pattern of the flow of fianance in Malaprabha Grameena Bank, both beneficiary wise and purposewise, the technique of Kendall's coefficient of concordance (W) was used. The data on the flow of credit beneficiarywise and purpose wise related to the period 1984 to 1994.

Ranks were assigned each year based on the magnitude of credit among the beneficiaries as well as among the purposes. The Kendall's coefficient of concordance was given by,

$$W = \frac{E\ D^2}{\frac{1}{2}\ m^2\ n(n^2-1)}$$

Where, D^2 = Difference between observed and actual values

Table 3.12. The Key Elements of Spread and Burden and their Relationship with Profit

Sl.No.	Expenditure	Income	Difference
1.	Interest Expenditure (K)	Interest Income (R)	Spread=(R-K) (S)
2.	Non-interest Expenditure N=Manpower Expences (M) + Other Expenses (O) i.e., N = M + O	Non-interest Income (C)	Burden=(N-C) (B)
3.	Total Expenses E = (K + N)	Total Income I = (R + C)	Profit=(I-E) P = (S - B)

Table 3.13. List of Various Ratios Selected for Analysis of Spread, Burden and Profitability of Malaprabha Grameena Bank.

Sl. No.	Ratio	Formula for calculation	Purpose
1.	Interest income ratio (r)	$\frac{\text{Total interest income}}{\text{Volume of business}} \times 100$	To assess the percentage of interest income on total volume of business.
2.	Interest paid ratio (k)	$\frac{\text{Total interest paid}}{\text{Volume of business}} \times 100$	To assess the percentage of interest expenditure on volume of business
3.	Non-interest income ratio (c)	$\frac{\text{Total non-interest income}}{\text{Volume of business}} \times 100$	To assess the percentage of non interest income on total volume of business.
4.	Other expenses ratio (o)	$\frac{\text{Other establishment expenses}}{\text{Volume of business}} \times 100$	To findout the percentage of establishment expenses on total volume of business
5.	Manpower expenses ratio (m)	$\frac{\text{Total man-power expenses}}{\text{Volume of business}} \times 100$	To check the percentage of manpower expenses on total volume of business
6.	Total non-interest expenditure ratio (n)	$\frac{\text{Total non-interest expenditure}}{\text{Volume of business}} \times 100$	To assess the percentage of non interest expenditure on total volume of business
7.	Profitability ratio (P)	$\frac{\text{Profit}}{\text{Volume of business}} \times 100$	Give the percentage of profit at a given volume of business

Table 3.14. Equations for the Calculation of Spread, Burden and Profitability Ratios

Sl.No.	Ratio	Formula for calculation
1.	Spread Ratio (SR)	Interest Earned Ratio - Interest Paid Ratio (r - k)
2.	Burden Ratio (BR)	Total Non-interest Expenditure Ratio - Interest income Ratio (n - c)
3.	Profitability Ratio (PR)	Spread Ratio - Burden Ratio (SR - BR)

m = Number of years

n = Number of observations

The Kendall's coefficient of concordance follows a chi-square distribution with (n-1) degrees of freedom. The significance of this coefficient implies that there was agreement among the rankings (years) and thus no change in the pattern of loans advanced.

3.4.4.1 Gini Coefficient

After analysing the pattern of flow of credit, if there was a significant high value of Kendall's coefficient of concordance, indicating that there was agreement in the rankings of different years, which implied no change in the pattern of flow of credit both beneficiarywise and purpose wise. Then over the years whether the bank has been concentrating on a particular beneficiary or particular purpose was analysed with the help of Gini Coefficient as given below.

$$\text{Gini Coefficient} = 1 - \frac{E\,[(x_i - x_{i-1})(y_i + y_{i-1})]}{10{,}000}$$

Where, x_i = Purposewise/ Beneficiarywise accounts

y_i = Credit disbursed (Rs. in lakhs)

A higher value of the coefficient indicate that there was concentration by the bank on a particular beneficiary/ purpose.

3.4.5 Principal Component Analysis

The selected physical and financial variables measured many facets of the performance of Malaprabha Grameena Bank. Principal component analysis was employed, with a view to aggregate the performance indicators into a few groups of factors. This technique was used by many researchers for grouping the factors and is the oldest and the best known technique of multivariate analysis.

The main purpose of adopting principal component analysis was to economise the number of variables. To achieve this objective, linear transformation of the variables of the following type was done.

$$Z_i = a_{i1}X_1 + a_{i2}X_2 + \ldots\ldots\ldots + a_{ip}X_p$$

Where Zi = Standardised variable

X_1, X_2, ... , X_p are the P varieties considered for the study and i = 1, 2,..... p are the components.

The coefficients a_{i1}, a_{i2} ..... a_{ip} are chosen that the new variates Z_1 has as large a variance as possible, the second Z_2 was chosen to be uncorrelated with the first and to have as large a variance as possible, etc. The technique of principal component analysis was adopted in order to identify the most important physical and financial indicators which had greater influence on the performance of Malaprabha Grameena Bank, Dharwad.

Once a set of variables are transformed by successfully extracting the largest common elements, then the principal component with eigen value less than one would be eliminated as per Kaiser's rule (Kaiser, 1960). Those principal components whose eigen values are greater than or equal to one would be retained to determine the number of components in the present study. Each component measures a dimension of performance and it is possible to correlate a component with a group of variables.

3.4.6 Methodology to Measure the Efficiency of Branches of the Bank

The efficiency of business organisations can be measured by various methods using both qualitative and quantitative indicators of development. The business organisations are generally evaluated by using the methods like ratio analysis, audit classification. However, these methods take into consideration only one or two aspects of growth in measuring the efficiency of the institutions. Moreover all these efficiency indicators do not reflect the same result as they do not consider all aspects simultaneously. Some ratios of growth indicators may indicate positive and some ratios may show negative and it becomes difficult to arrive at a final conclusion about the overall performance of the organisation.

The scale developed (Aruna Rao et al. 1991) for the purpose of measuring the performance of business organisations which incorporates multidimensional aspect of the performance has been applied to financial institutions for the first time to classify the selected branches of Malaprabha Grameena Bank into good, satisfactory and poor branches.

Let there be 'n' branches and 'K' variables which indicate the performance of the branches. The 'K' variables will be grouped into 'r' classes. The basis of classification being that within a class the variables combined together measure the particular dimension of development. Let X_{ij} denote the realised value for i^{th} branch for the i^{th} variable ($i = 1$ to n and $j = 1$ to K).

The first step in the construction of scale relates to the conversion of the realised values of each variable for each branch into percentile (or centile) scores using the assumption of normal distribution. Thus for the i^{th} branch the realised value x_{ij} will be transformed into a percentile score P_{ij} by the relation.

$$P_{ij} = P[X_{ij} \leq x_{ij}] \times 100 \quad \ldots\ldots\ldots \quad (1)$$

The actual steps of computation of P_{ij} values are as follows.

1. Compute the mean Mj and standard deviation r_j for jth variable.

2. Transform the x_{ij} into standard normal variate Z_{ij} by the relation

$$Z_{ij} = \frac{x_{ij} - M_j}{r_j} \quad \ldots\ldots\ldots\ldots (2)$$

3. Read the area below the Z_{ij} by referring to the table of area under normal curve.

4. Compute the average percentile score for each class and let 'M_{ik}' denote the average score for i^{th} branch for k^{th} class (k =1 to r).

5. Then the scale value for the i^{th} branch is given by

$$S_i = \sum_{k=1}^{r} W_k M_{ik} / \sum_{k=1}^{r} W_k \quad \ldots\ldots\ldots\ldots (3)$$

Where S_i = Scale value for the i^{th} branch

W_k = Weights attached to the k^{th} class

M_k = Percentile score for each class

6. The branches can be classified into three groups, then the cut off points can be shown as follows.

i) Those branches which come under the scale value of less than mean - 0.425 standard deviation can be considered as poor performing branches.

ii) Those branches which come under the scale values between mean - 0.425 standard deviation and mean + 0.425 standard deviation can be considered as satisfactory branches.

iii) Those branches which fall under the scale values of more than mean + o.425 standard deviation can be considered as good performing branches.

Here the mean and standard error refers to the mean scale values for `n' branches given by ES_i/n and variance $E(S_i - S)2/(n-1)$

After having discussions with the officials of the bank following variables relating to the year 1993-94 have been considered for measuring the efficiency of the branches, they were as follows.

3.4.6.1 Physical Variables

Staff, deposit accounts, deposit accounts per employee, outstanding advance accounts, outstanding advance accounts per employee, total business, productivity account, agricultural advance account and allied advance account.

3.4.6.2 Financial Variables

Deposit amount, deposit amount per employee, outstanding advance amount, outstanding advance amount per employee, total business amount, productivity amount, agricultural advance

amount, profit/loss amount, overdues amount and recovery percentage.

This technique was applied for selected fourteen branches of Malaprabha Grameena Bank, Dharwad.

3.4.7 Capital Adequacy Analysis

Capital Adequacy as an instrument of effective supervision of banking system is a recent concept introduced by the Reserve Bank of India. Both the apparent and real financial positions of the banks are brought out with the help of a few visible ratios. Consequently, ever since the reform process has been initiated in the Indian banking industry as a part of the liberalisation of the economy in general and the financial sector in particular, the subject of capital adequacy has become most important and also much talked about subject.

In order to workout the capital adequacy norms, different types of assets of the bank were multiplied with risk weights to get risk weighted assets as per the norms of Reserve Bank of India. As per the definition, the working capital of the bank should be four per cent of the risk weighted assets by 1994 and eight per cent by 1996.

The risk weightage pattern has been followed strictly as per the RBI prescription which was based on BIS frame work though there was a difference of opinion on this, among bankers

and researchers. However, to make things more vivid the precise weightage pattern followed for the computation purpose is given in Table 3.15.

Even though it was not mandatory on the part of Malaprabha Grameena Bank to attain the norm of capital adequacy, however this analysis was attempted to see the real capital strength of the bank to suggest suitable policy so as to strengthen further the capital base of the bank. The capital adequacy was workedout for the current year and for the projected years based on the growth observed in the past in respect of risk weighted assets and capital of the bank.

3.4.8 Break-Even Analysis

The break-even level volume of business of the bank was workedout at the existing level of working funds as well as assuming a future growth based on the past performance.

A period of three years (1991-1994) was considered and actual data were taken in to consideration to workout break-even level volume of business of the bank as at the end of 1993-94. Projections were made for the future period (1994-1999) for various financial indicators and the expected business to be achieved break-even level volume of business of the bank were calculated as given below.

Table 3.15. Risk Weightage Pattern

Types of Assets	Risk weightage (%)
(A) Funded Assets	
1. CRR and SLR item	0
2. Investments	
(a) In government and other approved securities	0
(b) Other Investments	100
3. Advances	
(a) Covered by banks/government guarantees	0
(b) Other secured and unsecured	100
4. Fixed assets and other assets	100
(B) Non-funded Assets	
a) Claims against the bank not acknowledged as debts	100
b) Liability for partly paid investments	100
c) Liability on account of outstanding forward foreign exchange contracts	3
d) Gurantees given on behalf of constituents	50
e) Acceptance, endorsements and other obligations	20
f) Other items for which the bank is contigently liable	50

Steps to Determine the Break Even level of Business

Break Even Business is assessed as under.

I. Workout the magnitude and relative share of aggregate monthly average deposits, borrowings, advances, bank balance, etc.

II. Ascertain Interest Surplus (Spread)

a) On aggregate Funds (Business)

Interest surplus (Spread) = Interest earned on Advances and Bank balance minus Interest paid on deposits and borrowings.

b) Per hundred rupees of funds

$$\text{Interest surplus (Spread)} = \frac{\text{Interest surplus (spread)}}{\text{Aggregate funds (Business)}} \times 100$$

III. Calculate Net operational cost (Burden)

Net operational cost (Burden) = Non-interest expenses minus non-interest incomes

IV. Determine when spread equals Burden or 'Break-even'

$$\text{Break-even level of business} = \frac{\text{Net operational cost (Burden)}}{\text{Spread per hundred rupees of funds or business}} \times 100$$

V. Split Break-even level business in to deposits, borrowings, advances, etc., in the same proportion.

3.4.9 Cluster Analysis

Cluster analysis, a formal multivariate technique which has been an important technique adopted in social and biological sciences to classify the characteristics into meaningful sets, known as clusters. It is a simple form of correlation analysis which provides a measure of similarity among different independent variables. The analysis commences with the data set of independent variables of the sample, later on which leads to the formation of homogeneous groups.

The technique of cluster analysis was adopted to analyse the opinion survey of the Directors and officials of the Malaprabha Grameena Bank, Dharwad about the performance of the bank. Clusters were formed by following minimum distance method also known as single linkage method. To begin with each variable was considered as a separate cluster, then the two most similar variables were grouped to form a cluster. This process of grouping would be continued until a single cluster was formed containing all the variables. The absolute values of correlation coefficients were used as measure of similarity and the coefficients were converted to the scale of 0 to 100.

It was presumed that higher the similarity values of the cluster, greater was the degree of association of that cluster with the working of the Malaprabha Grameena Bank.

In order to have better understanding and interpretation of the cluster analysis results, the clusters were further aggregated based on the degree of similarity. The variables having similarity values greater than Mean + 0.425 standard deviation were classified as high aggregate clusters. In the case of variables having similarity values between Mean + 0.425 standard deviation and, Mean - 0.425 standard deviation were considered as medium aggregate cluster and the variables having similarity values less than, Mean - 0.425 standard deviation were considered as low aggregate clusters. After classification of clusters into different groups, the variables having higher similarity values were retained in respective clusters.

3.4.10 Discriminant Function Analysis

Discriminant function is a statistical tool used to discriminate between the two or more classes of persons or objects on the basis of characteristics which are thought to be relevant. This analysis helps us to know the relative importance of different variables in regard to their power to discriminate between the groups. This function enables to know whether any borrower is likely to be a willful or non-willful defaulter on the basis of information on the selected variables. The relative importance of the variables in regard to their power to discriminate between the willful and non-willful defaulters can also be known with the help of

discriminant function. For the application of discriminant function, two groups are expected to be roughly of equal size, thus the sample comprised of 40 willful defaulters and 40 non-willful defaulters. A borrower who did not have enough income to repay the loan was defined as non-willful defaulter. On the other hand, a willful defaulter had sufficient income to repay the loan but he did not repay it deliberately. The discriminant function used in the study could be mathematically represented as follows,

$$Z = L_1X_1 + L_2X_2 + L_3X_3 + L_4X_4 + L_5X_5$$

Where,

Z = Total discriminant score for willful and non willful defaulters

X1= Educational level of the respondent

X2= Size of the family

X3= Income of the family

X4= Expenses of the family

X5= Amount due

Li=(i=1,2....5) linear discriminant coefficient.

The function is constructed by choosing values of Li's in such a way that the ratio :

$$\frac{\text{Variation of 'Z' between the groups}}{\text{Variation of 'Z' within two groups}} \text{ is maximised}$$

The discriminant function was tested for the significance to know whether or not these selected variables taken together were sufficiently discriminating the two groups or not. The Mahalnobi's $D^2 = E\ L_i d_i$ was used as a measure of distance between the two groups. It is the test of the hypothesis that there are no differences in the mean values of chosen variables for the two groups. After transformation this D^2 statistic become a 'F' statistic which is then used to see whether the two groups are different from each other. For this the statistic 'F' was used.

$$F = \frac{N_1 N_2\ (N_1+N_2-P-1)}{P(N_1+N_2)(N_1+N_2-2)}\ D^2$$

Where,

P = Number of variables considered in the function

N_1 = Number of non willful defaulters

N_2 = Number of willful defaulters.

The value of F is tested at P and N_1+N_2-P-1 degrees of freedom.

3.5 Definition of the Concepts Used

3.5.1 Small Farmer (SF)

The cultivator whose holdings were less than two hectares of unirrigated land or one hectare of irrigated land.

3.5.2 Large Farmers (LF)

The farmers whose holdings were more than two hectares.

3.5.3 Agricultural Labourers (AL)

Those who donot possess cultivable land but who derive income from work in agricultural operations by way of wages.

3.5.4 Rural Artisans (RA)

Those who are self employed like rope makers, black smiths, carpenters, cobblers, lime makers, carpet weavers, etc.

3.5.5 Small Businessmen

Small business/business enterprises include individuals and firms managing a business enterprise established mainly for the purpose of providing any service other than professional service.

Ex. Beedimakers, cycle shops, hair dressing, hotels, juice vendors, Launderers, milk vending, book sellers, etc.

3.5.6 Professional and Self Employed

Any individual or a firm who or everyone of whose partners is trained in any art or craft and holds either a degree or a diploma or is technically qualified or skilled in his line and is rendering professional services.

Ex. Doctors, Dentists, Lawyers, Mechanics, Engineers, Job typist, photographers, etc.

3.5.7 Income to the Bank

The components of income includes interest on advances, commission and others.

3.5.8 Expenditure to the Bank

The components of expenditure of the bank were interest paid, establishment expenses, etc.

3.5.9 Break-Even Volume of Business

It implies a level of business at which the total revenue equals the total cost.

3.5.10 Non-performing Asset

A non-performing asset is defined as a credit facility in respect of which interest remained `past due' in the year ended March for a period of four quarters.

3.5.11 Income of the beneficiaries

Income of the beneficiaries was measured in rupees taking into consideration the agriculture and non-agriculture sources.

3.5.12 Employment of beneficiaries

Employment was measured in mandays generated both in agricultural and non-agricultural activities.

CHAPTER - IV

RESULTS

IV. RESULTS

Consistent with the objectives of the study, the data collected from various sources was analysed and interpreted. The main findings of the study are presented in this chapter under the following heads :

4.1 Performance of the Malaprabha Grameena Bank

4.1.1 Performance indicators of the Malaprabha Grameena Bank

4.1.2 Analysis of the bank's performance through financial ratios

4.1.3 Growth pattern of Malaprabha Grameena Bank

4.1.4 Pattern of credit flow and deposit mobilisation

4.1.5 Measurement of branch performance

4.1.6 Capital adequacy level of the bank

4.1.7 Break-even volume of business

4.1.8 Relative performance of the bank

4.1.9 Overdues of the bank

4.1.10 Association between managerial efforts and business performance

4.2 Impact of Malaprabha Grameena Bank

4.2.1 Credit share of Malaprabha Grameena Bank

4.2.2 Impact of Malaprabha Grameena Bank on beneficiaries

4.3 Assessment of the working of Malaprabha Grameena Bank

4.3.1 Opinions of policy makers of the bank

4.3.2 Opinions of officials of the bank

4.3.3 Opinions of other bankers

4.3.4 Opinions of beneficiaries of the bank

4.1 PERFORMANCE OF THE MALAPRABHA GRAMEENA BANK

4.1.1 Performance Indicators of the Malaprabha Grameena Bank

In order to have a clear understanding and better insight into the working of the organisation, growth and development, the study of fundamental features becomes a prerequisite step. The performance indicators of the bank are broadly categorised into physical and financial indicators based on the nature of variables.

4.1.1.1 Physical Performance Indicators of Malaprabha Grameena Bank

The physical performance indicators of the Malaprabha Grameena Bank are presented in the Table 4.1 and Fig 4.1 to 4.3.

The bank has opened a number of branches in it's area of operation covering various parts of Belgaum and Dharwad districts over a period of 18 years. The average number of branches were higher during the period of development (186) compared to the branches in the period of establishment (52) with overall average of 149 branches.

The families covered increased from 104 in the period of establishment to 559 in the period of development with an overall average of 433 families per village.

The average number of villages covered during the period of development were higher (1295) as compared to the number of

Table 4.1. Physical Performance Indicators of Malaprabha Grameena Bank

Indicators	Period-I (1976-80)	Period-II (1981-94)	Period-III (1976-94)
I. Coverage (No.)			
Branches	52	186	149
Families/village	104	559	433
Villages	369	1295	1038
II. Manpower (No.)			
Total	193	1186	910
Per branch	5	6	6
III. Accounts (No.)			
Deposit (lakhs)	0.748	6.211	4.693
Advance (lakhs)	0.241	1.765	1.342
IV. Accounts per branch (No.)			
Deposit (lakhs)	0.011	0.032	0.026
Advance (lakhs)	0.004	0.009	0.007
V. Accounts per employee (No.)			
Deposit (lakhs)	0.00295	0.00522	0.00459
Advance (lakhs)	0.00102	0.00153	0.00139

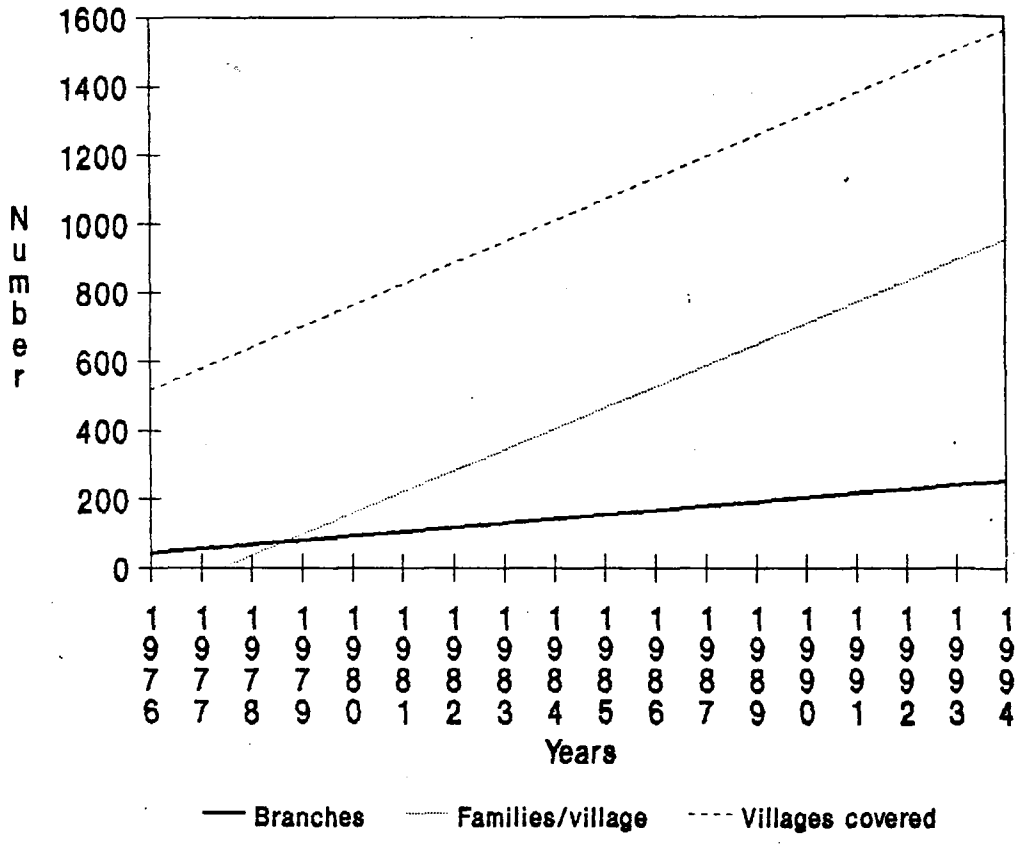

Fig 4.1. Trends in coverage of MGB

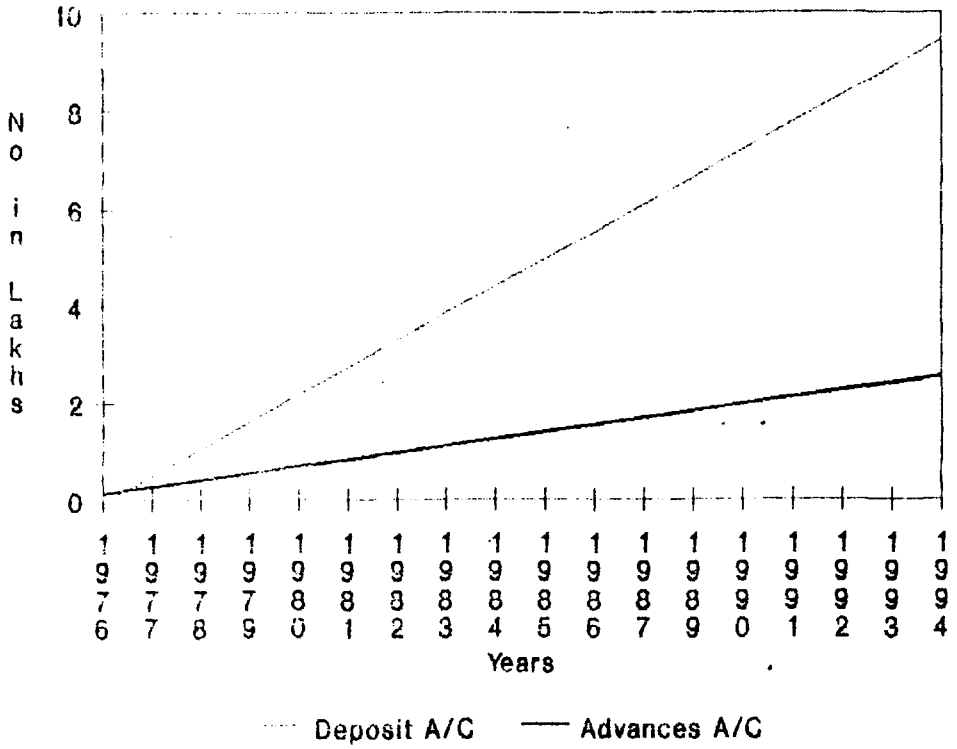

Fig 4.2.Trends in accounts of MGB

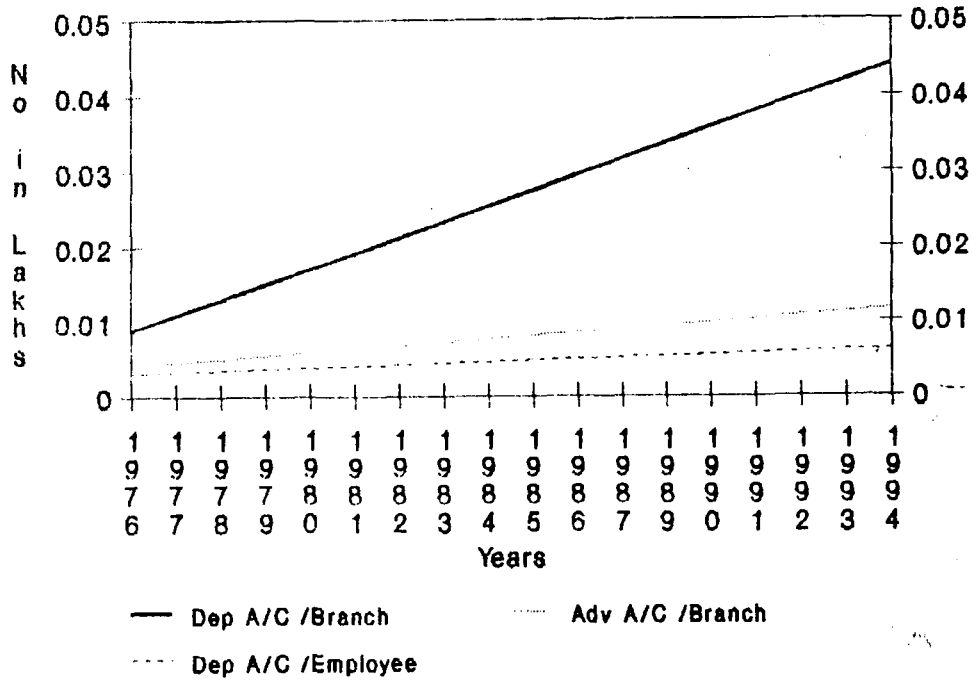

Fig 4.3 Trends in per branch accounts of MGB

villages covered in the period of establishment (369) and overall period (1038).

Keeping in view the expansion of branches and activities of the bank since inception, the required manpower to handle the affairs has increased from an average of 193 during the period of establishment to 1186 during the period of development with an overall average of 910 staff members. The employees per branch were same for the development and overall period at six employees compared to five in the establishment period.

The deposit accounts and advance accounts showed an increasing trend. Average number of deposit and advance accounts increased from 0.748 lakhs and 0.241 lakhs in the period of establishment to 6.211 lakh and 1.765 lakhs during the period of development with an overall average of 4.693 lakhs and 1.342 lakhs respectively.

Average deposit and advance accounts per branch were increased from 1100 and 400 in the period of establishment to 3200 and 900 in the period of development with an overall average of 2600 and 700 respectively. A similar trend was observed with respect to deposit and advance accounts per employee. Average deposit accounts per employee and advance accounts per employee increased from 295 and 102 in the period of establishment to 522 and 153 in the period of development with an overall average of 459 and 139 respectively.

4.1.1.2 Financial Performance Indicators of Malaprabha Grameena Bank

The performance of the financial resources could be judged by examining the trend of various financial indicators such as credit disbursement, deposits, total business, income, total expenses, profitability, overdues, recovery, etc. The financial performance indicators of the bank are presented in the Table 4.2 and Fig 4.4 to 4.7.

Average advance and deposits in the period of establishment were Rs. 237 lakhs and Rs. 200 lakhs compared to Rs. 7268 lakhs and Rs. 5586 lakhs in the period of development, with overall average of Rs. 5315 lakhs and Rs. 4090 lakhs respectively.

The total business of the bank had increased from Rs. 437.36 lakhs in the period of establishment to Rs. 12854.71 lakhs in the period of development. Overall business done by the bank comes to Rs. 9405.44 lakhs.

The gross income and expenditure of the bank in the development period had increased over the establishment period. The bank on an average incurred losses in all periods.

The overdues were higher in the development period compared to establishment and overall period. The recovery percentage of the bank credit has improved from 42.36 per cent

Table 4.2. Financial Performance Indicators of Malaprabha Grameena Bank

(Rs. in lakhs)

Indicators	Period-I	Period-II	Period-III
I. At Bank level			
Advances	237.32	7268.43	5315.34
Deposits	200.03	5586.28	4090.10
Business	437.36	12854.71	9405.44
Income	26.21	1026.74	748.81
Expenditure	29.63	1045.28	763.16
Profit or loss	-3.43	-27.44	-20.77
Overdues	33.48	3147.01	2282.16
Recovery (%)	42.37	52.26	49.51
Refinance	104.66	3807.81	2779.16
Participation in govt. programmes	72.63	455.78	349.35
Share capital	25.00	38.46	34.72
Non perf. asset	0.00	642.13	463.76
Credit-Deposit ratio(%)	107.92	147.30	136.36
Borrowings	138.36	4286.61	3134.32
II. Per branch			
Advances	3.18	36.66	27.36
Deposits	2.76	27.87	20.89
Business	5.94	64.53	48.25
III. Per employee			
Advances	0.87	5.64	4.31
Deposits	0.74	4.21	3.24

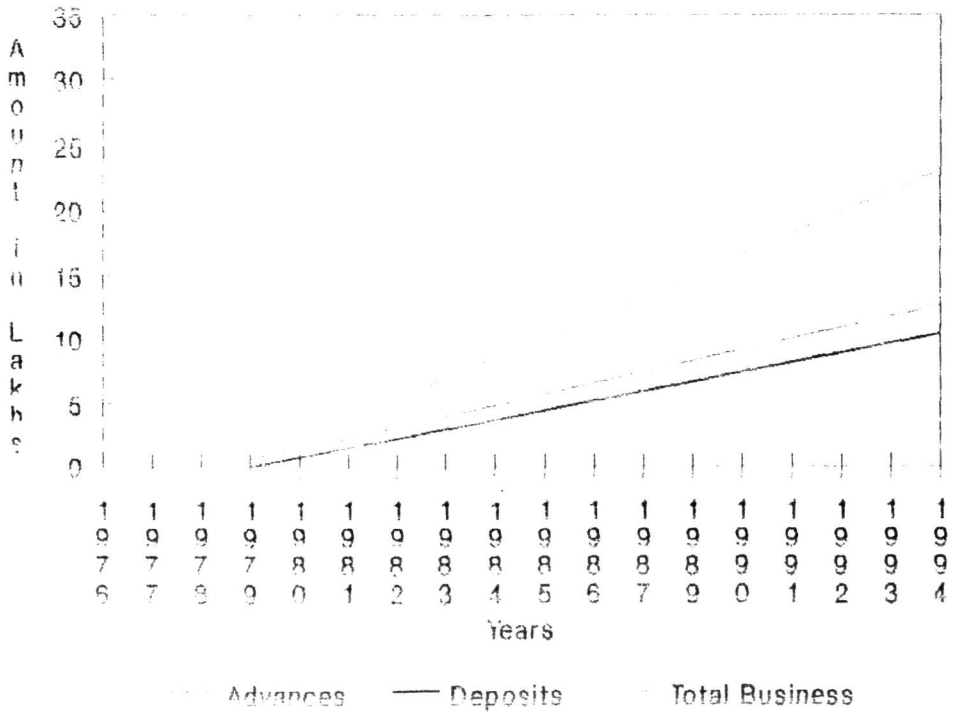

Fig 4.4 Trends in financial performanc of MGB

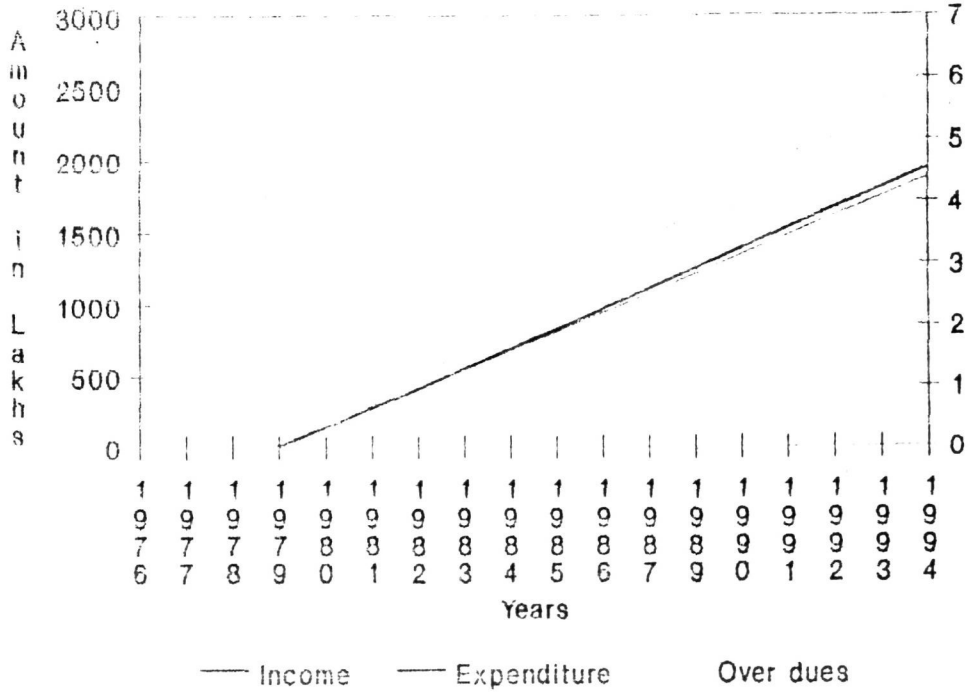

Fig 4.5 Trends in income-expenditure a overdues of MGB

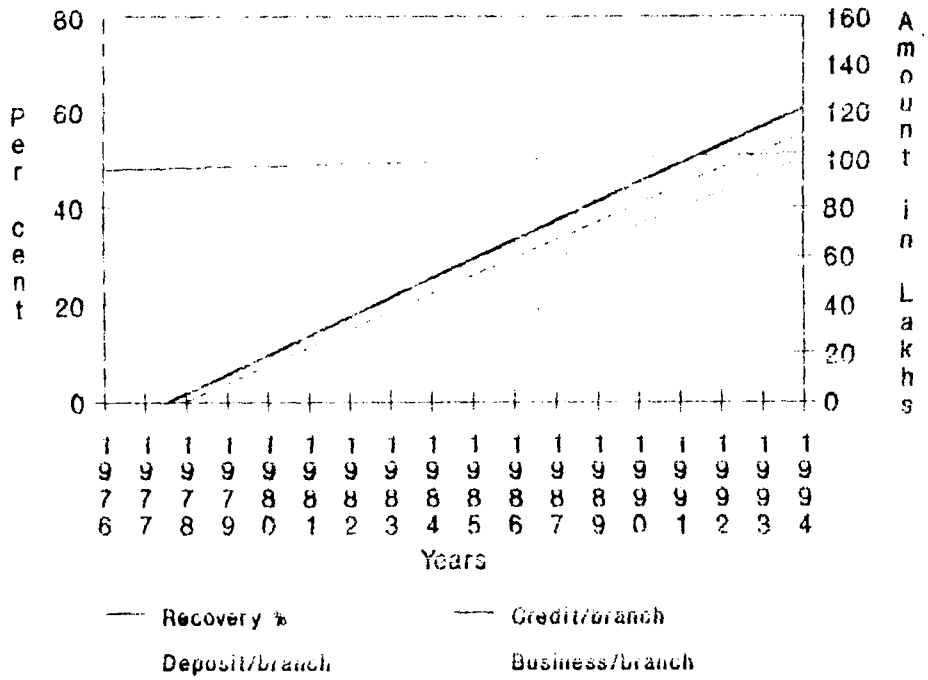

Fig 4.6 Trends in per branch financial performance of MGB

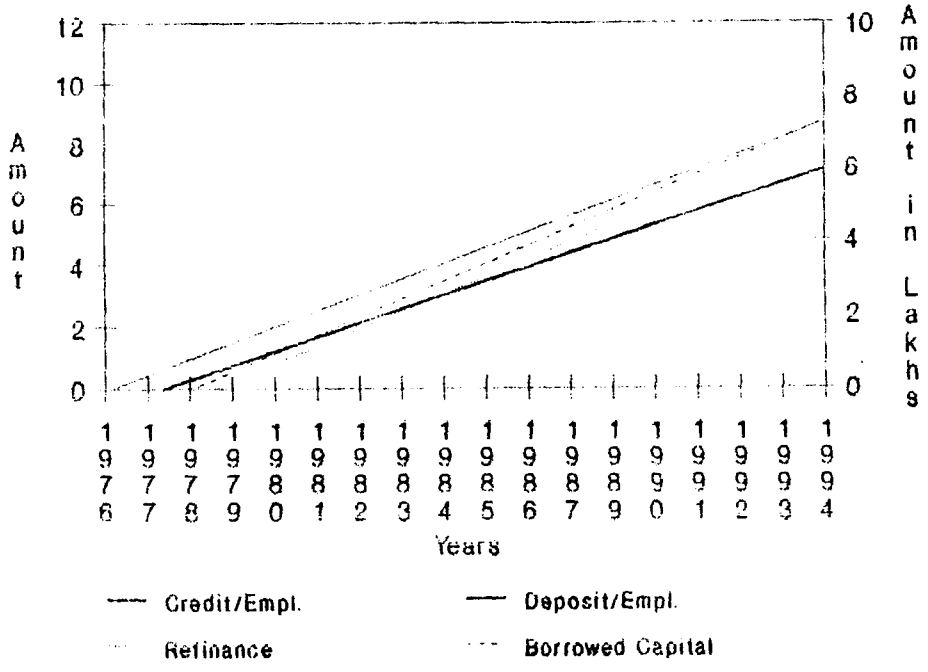

Fig. 4.7 Trends in borrowing and per employee indicators of MGB

in the period of establishment and increased to 52.25 per cent in the period of development with overall recovery of 49.5 per cent.

The refinance availed by the bank has increased from Rs. 104.66 lakhs in the establishment period to Rs. 3807.81 lakhs in the development period with an overall average of Rs. 2779.16 lakhs. A similar trend was observed with respect to participation in Government programmes, share capital, credit deposit ratio and borrowings. The non-performing assets were observed only in the development period to the extent of Rs. 642.13 lakhs.

The average credit dispensation and deposit mobilisation per branch were increased from Rs. 3.17 lakhs and Rs. 2.76 lakhs in the period of establishment to Rs. 36.66 lakhs and Rs. 27.86 lakhs in the period of development with an overall average of Rs. 27.36 lakhs and Rs. 20.89 lakhs respectively. Average business per branch increased from Rs. 5.94 lakhs in the period of establishment to Rs. 64.52 lakhs in the period of development with an overall average of Rs. 48.25 lakhs.

On an average, the advances and deposits per employee increased from Rs. 0.87 lakhs and 0.74 lakhs to Rs. 5.64 lakhs and 4.20 lakhs respectively in the development period. The overall average was Rs. 4.31 lakhs and Rs. 3.24 lakhs advance and deposits respectively.

4.1.2 Analysis of the Bank's Performance through Financial Ratios

The financial ratio represents the relationship between two accounting figures expressed mathematically. In financial analysis, a ratio is used as an index or yardstick for evaluating the financial performance or status of a bank or institution against certain standards. Ratio analysis technique is popular in the accounting system of enterprises in general and helps in spotting trends towards better or poor performance. It is helpful in finding significant deviations from an average or pre-determined standard. The financial ratios relevant to Malaprabha Grameena Bank are grouped under different categories namely, liquidity ratios, solvency ratios, tests of strength, profitability ratios and efficiency ratios.

4.1.2.1 Liquidity Ratios

These ratios were computed to measure the ability of the bank to meet it's liability obligations in the short-run. The possession of assets is expressed as their liquidity which may at any time required to meet the liability obligation of the bank. Four liquidity ratios were computed as detailed below and are presented in the Table 4.3.

a) Current ratio

b) Credit-deposit ratio

c) Liquid assets to total assets ratio

d) Acid-test ratio

Table 4.3. Liquidity Ratios of Malaprabha Grameena Bank

Ratios	Period-I	Period-II	Period-III
Current ratio	2.770	3.153	3.046
Credit-deposit ratio	107.923	147.304	136.365
Liq. asst. to tot. asst.	0.406	0.121	0.200
Acid test ratio	0.987	0.546	0.669

a) Current Ratio

The ability to pay-off debts can be measured by establishing a relationship between current assets to current liabilities. In the given context 'current' implies readily available with reference to assets and immediate or urgent in case of liabilities, both components spread at the most for one year. The average current ratio was higher (3.153) in the development period compared to establishment period (2.770) with an overall average of 3.046 for the entire period.

b) Credit Deposit Ratio

Another criterion suitable for assessing the financial performance of Malaprabha Grameena Bank was creating credit out of the deposits they have mobilised. The average credit deposit ratio for the establishment period and the overall period was lower than the development period.

c) Liquid Assets to Total Assets Ratio

The ratio was found to be less than unity in all the periods. The average ratios in the period of establishment and development were observed to be 0.406 and 0.121 respectively. The overall average was found to be 0.200.

d) Acid-Test Ratio

This ratio is a refined measure of liquidity and assesses how liquid the bank would be if business operations

come to an abrupt halt. The average ratios for the establishment and development periods were observed to be 0.987 and 0.546 with an overall average of 0.669.

4.1.2.2 Tests of Solvency

Two types of ratios were computed to ascertain the solvency position of the bank in order to measure the share of the bank against the funds provided by it's creditors and the ratios were presented in the Table 4.4.

a) Debit-Equity Ratio

The ratio was found to be higher in the development period compared to overall and establishment periods.

b) Indebtedness Ratio

The average ratio of the development period was less (3.739) than the establishment period (3.999) with overall average of 3.811.

4.1.2.3 Tests of Strength

Net worth and netcapital ratios were used to assess the real strength of the bank and presented in the Table 4.5.

a) Net Worth

The average networth during the establishment period and development period were -21.151 lakhs and Rs. 268.516 lakhs respectively, with an overall average of Rs. 188.053 lakhs.

Table 4.4. Tests of Solvency

Ratios	Period-I	Period-II	Period-III
Debt-equity ratio	3.319	27.635	20.881
Indebtedness ratio	3.999	3.739	3.811

Table 4.5. Tests of Strength

Ratios	Period-I	Period-II	Period-III
Net worth	-21.151	268.516	188.053
Net capital ratio	0.844	1.019	0.971

b) Net Capital Ratio

The average net capital ratio for the establishment and development period were found to be 0.844 and 1.019 respectively with an overall average of 0.971 for the entire period under study.

4.1.2.4 Profitability Ratios

Following profitability ratios were used to analyse the financial health of the Malaprabha Grameena Bank, namely

a) Net Profits to Total Assets

b) Net Profits to Net worth

c) Net Profit to Fixed assets.

These ratios are depicted in the Table 4.6.

a) Net Profits to Total Assets

The ratio of net profits to total assets was negative (-0.023) in the establishment period as well as in the overall period (-0.006). In the period of development, the ratio was found to be zero.

b) Net Profits to Net Worth

The ratio was negative in development and overall periods. The ratio was not calculated in the establishment period since both profit and net worth were negative. The ratio

Table 4.6. Tests of Profitability

Ratios	Period-I	Period-II	Period-III
Net profit to total assets	-0.023	0.000	-0.006
Net profit to networth	-*	-13.145	-9.570
Net profit to fixed assets	-0.461	-0.450	-0.453

* The value is not calculated since both profit and net worth were negative

in the development period was -13.145 as compared to -9.570 in the overall period.

c) Net Profit to Fixed Assets

The ratio was found to be higher (-0.461) in the establishment period. During the development period and overall period, the ratios were also found to be negative, -0.450 and -0.453 respectively.

4.1.2.5 Efficiency Ratios

The efficiency ratios employed in the study and their outcome are presented in the Table 4.7.

a) Gross Ratio

The average value of the ratio in the establishment period was found to be higher (119.466) than the development period (99.815) with an overall average of 105.273 for the entire period.

b) Operating Ratio

The ratio in the establishment period was found higher (66.71) compared to overall period (43.75) and development period (43.53).

Table 4.7. Tests of Efficiency

Ratios	Period-I	Period-II	Period-III
Gross ratio	119.466	99.815	105.273
Operating ratio	66.710	43.530	43.750

4.1.2.6 Spread, Burden and Profit Analysis of Malaprabha Grameena Bank

The main source of income to the bank was interest earned on advance. This was supplemented by non-interest income. On the other hand, interest on deposits and borrowings, salaries of staff and other establishment charges constitute the expenditure of the bank. These constituents of revenue and cost were analysed in relative terms, the end product of which gives the profitability.

The outcome of the analysis of spread, burden and profitability of Malaprabha Grameena Bank are shown in the Tables 4.8 and 4.9. The analysis was carried out in terms of absolute values and also in terms of ratios. The details are discussed here under.

a) Spread, Burden and Profit of Malaprabha Grameena Bank

An analysis of the Table 4.8 revealed that the bank has incurred losses in the establishment period, development period as well as in the overall period. The extent of losses were higher in the development period compared to overall period and establishment period.

For profitability, the spread and burden were most important factors. The spread of the bank was higher (380.71 lakhs) in the development period. Whereas it was Rs. 278.30

Table 4.8. Spread, Burden and Profit of Malaprabha Grameena Bank from 1976 to 1994

(Amount in lakhs)

Variables		Period-I	Period-II	Period-III
Interest income	(R)	24.17	979.09	713.84
Interest expenditure	(K)	12.15	598.38	435.54
Spread	S=(R-K)	12.03	380.71	278.30
Manpower expenses	(M)	9.96	359.93	262.72
Other expenses	(O)	7.52	86.97	64.90
Non-interest expenses	N=(M+O)	17.48	446.91	327.62
Non-interest income	(C)	2.04	47.63	34.97
Burden	B=(N-C)	15.44	399.28	292.65
Profit	P=(S-B)	-3.42	-18.56	-14.35

lakhs in the overall period. On the contrary, the spread was minimum (Rs. 12.03 lakhs) in the establishment period.

The burden in the development period was higher (Rs. 399.28 lakhs) compared to the establishment period (Rs. 15.44 lakhs) and overall period (Rs. 292.65 lakhs). The development period values in respect of the three parameters viz., manpower expenses, other expenses and non-interest expenses were found to be higher than the establishment period and overall period.

b) Spread, Burden and Profitability Ratios of Malaprabha Grameena Bank

For the purpose of checking the results of the spread, burden and profitability of Malaprabha Grameena Bank, the key ratios and equations indicated in the Tables 3.13 and 3.14 were selected. The summary of the results of ratio analysis of the Malaprabha Grameena Bank for the period under study were presented in the Table 4.9. The table revealed that the profitability ratios were found to be negative in all the periods.

The interest income ratio was found to be higher than the interest expenditure ratio in all the periods. The interest income ratio and expenditure ratios were found to be higher in the development period compared to overall period and establishment period. On the contrary the spread ratio was higher in the development period followed by overall period and

Table 4.9. Analysis of Spread, Burden and Profitability Ratios of Malaprabha Grameena Bank

Variables		Period-I	Period-II	Period-III
Interest income ratio	(r)	5.53	7.62	7.59
Interest expenditure ratio	(k)	2.78	4.65	4.63
Spread ratio	s=(r-k)	2.75	2.97	2.96
Manpower expenses ratio	(m)	2.28	2.80	2.79
Other expenses ratio	(o)	1.72	0.68	0.69
Non-interest expenses ratio	n=(m+o)	4.00	3.48	3.48
Non-interest income ratio	(c)	0.47	0.37	0.37
Burden ratio	b=(n-c)	3.53	3.11	3.11
Profit ratio	p=(s-b)	-0.78	-0.14	-0.15

establishment period. The manpower expanses ratio followed the similar trend. The other expenses ratio was higher in the establishment period. The non-interest income ratio was lower than the non-interest expenditure ratio in all the periods.

4.1.3 Growth Pattern of Malaprabha Grameena Bank

In order to assess the performance of Malaprabha Grameena Bank, in all 30 variables comprising of both physical and financial were subjected to compound growth rate analysis for the three periods covering 1976 to 1994.

4.1.3.1 Growth in Physical Indicators

The growth pattern of the selected physical indicators of the bank for the three periods are presented in the Table 4.10.

All the variables exibited a positive growth except manpower per branch, villages covered and advance accounts per employee.

Growth in number of branches was found to be the highest in the establishment period with the value 140.37 per cent followed by the overall period growth rate of 16.99 per cent and the least growth rate (4.71 per cent) was observed during the development period. The growth rates were highly significant in the latter two periods compared to the former.

Table 4.10. Compound Growth Rate of Physical Indicators of Malaprabha Grameena Bank

Indicators	Compound Growth Rates		
	Period I	Period II	Period III
I. Coverage			
Branches	140.37*	4.71**	16.99**
Families/village	16.76NS	17.12**	18.05**
Villages covered	213.93*	-0.99NS	17.23**
II. Manpower			
Total	87.01**	9.09**	20.44**
Per branch	-22.27NS	4.18**	2.94NS
III. Accounts			
Deposit	345.93NS	9.75**	32.57**
Advance	195.94*	6.82**	25.86**
IV. Accounts/Branch			
Deposit	85.52NS	4.81**	13.42**
Advance	23.12NS	2.02**	7.57**
V. Accounts/Employee			
Deposit	136.78NS	0.50NS	10.07*
Advance	59.04NS	-2.08**	4.60NS

** Significant at 1 per cent level
* Significant at 5 per cent level.

A non-significant growth was seen with respect to family coverage per village during the establishment period. In other two periods significant growth rates were observed. In the case of villages covered, significant growth was observed in the establishment period as well as in the overall period. However, a negative and non-significant growth was noticed during the development period.

The growth in the manpower employed by the bank was 87.01 per cent in the establishment period and fell to 9.09 per cent in the development period, with an overall growth rate of 20.44 per cent. However, the growth pattern was found to be highly significant in all the periods.

The growth rate in manpower per branch was found to be higher in the development period (4.18 per cent) and was highly significant. The growth rate in the establishment period was negative and in the overall period it was observed to be positive. However, these were found non-significant.

Deposit accounts of the bank increased less than ten per cent during the development period and more than 30 per cent during the overall period. However, a non-significant high growth rate was observed in deposit accounts during the establishment period. The advance accounts showed a significant growth pattern in all the periods, in which the growth rate was highest in the establishment period and least in the development period.

The deposit and advance accounts per branch were found to be highly significant in the latter two periods and were non-significant in the establishment period. In the case of deposit accounts per employee, a significant positive growth was observed while a significant negative growth was found in the case of advance accounts per employee (-2.08 per cent) in the development period. In the overall period the growth rate was 4.60 per cent.

4.1.3.2 Growth in Financial Indicators

Growth pattern in the selected financial indicators of the bank are presented in the Table 4.11.

It could be seen from the table that out of 19 variables, only one variable in all the periods was found to be with negative growth i.e., profit or loss while recovery per cent and C.D. ratio had negative growth rate during development period. However, the former variable was found to be non-significant in both establishment and development period. In the establishment period, eight variables were found to be significant as against 17 variables each in the development and overall periods.

The Advances of the bank registered a higher growth in the establishment period followed by overall period and was the least in the development period. Similar trend was observed in the case of deposits, total business, income and expenditure.

Table 4.11. Commpound Growth Rate of Financial Indicators of Malaprabha Grameena Bank

Indicators	Period I	Period II	Period III
I. At bank level			
Advances	345.93*	19.72**	48.88**
Deposits	298.28*	25.35**	47.84**
Business	319.96*	22.02**	48.29**
Income	245.56**	23.98**	49.33**
Expenditure	251.13*	25.48**	48.43**
Profit or loss	-82.44 NS	-51.95 NS	-43.04 NS
Overdues	0.10 NS	135.61*	354.03**
Recovery percent	11218.23 NS	-4.30**	61.93*
Refinance	3534.29 NS	22.62**	80.76**
Participation in government programme	11846.21 NS	2.73 NS	88.32**
Share capital	0.00 NS	10.62**	6.18**
Non-performing assets	0.00 NS	773.20**	338.41**
Credit-deposit ratio	11.96 NS	-4.40**	0.70 NS
Borrowings	3936.64 NS	17.58**	80.21**
II. Per branch			
Advances	85.52 NS	14.33**	27.25**
Deposits	65.69**	19.72**	26.36**
Business	74.54**	16.53**	26.74**
III. Per employee			
Advances	138.45 NS	9.74**	23.61**
Deposits	113.18*	14.79**	22.75**

** Significant at 1 per cent level
* Significant at 5 per cent level.

The variable profit or loss exhibited a negative growth pattern interestingly in all the periods. However, this variable was found to be non-significant.

The growth in overdues was observed to be ten per cent in the establishment period and showed an increasing significant trend in the development and overall period.

In the case of recovery, the growth rate was negative in the development period and found significant in the overall period, with 61.93 per cent growth. However, the growth was non-significant in the establishment period.

The extent of refinance facility availed by the bank was the highest in the overall period followed by development period. However, this ratio was found to be non-significant in the establishment period. The growth pattern in respect of participation of the bank in Government sponsored programmes was found to be significant only in the overall period.

The variables such as share capital and non-performing assets were found to be significant in both development and overall periods in which the growth was more in the former period as compared to the latter period.

Credit-deposit ratio indicated a negative but significant growth pattern in the development period. However, it was non-significant in the remaining periods even though it was registered a positive growth.

The borrowings of the bank were found to be higher in the establishment period but it was non-significant. A significant growth in this indicator was observed in the development and overall period where in the growth was higher in the former period compared to the latter.

Per branch advances, deposits and business indicators were found to be significant in all periods except the advances per branch in the establishment period. All these significant variables registered a higher growth in the establishment period followed by overall period and the least was in the development period. Same phenomenon was observed with respect to the indicators such as advance and deposit per employee.

4.1.4 Pattern of Flow of Credit and Deposit Mobilisation

With the advent of new technology in agriculture the cash requirements to purchase modern inputs went up perceptibly. Hence, to cope with the modern technology that crept into agriculture and to stabilize agricultural production, farmers need to be advanced adequate credit for diversified purposes. The analysis was aimed at examining the extent of flow of credit from Malaprabha Grameena Bank for various purposes and to different categories of beneficiaries. Kendall's coefficient of concordance was employed to study whether there are any changes in the pattern of the flow of credit over years. Gini coefficient technique was used to

identify the extent of concentration of credit on a particular beneficiary or purpose. The resource mobilisation through deposit mobilisation was also analysed.

4.1.4.1 Purposewise Flow of Credit

The purposewise flow of credit from Malaprabha Grameena Bank has been shown in the Table 4.12. It could be seen from the table, that on an average the crop loan accounts dominated among the borrower accounts. This was followed by credit to businessmen/small road transport operators (professionals). Term loans to agriculture occupied the third position and the least was loan accounts related to artisans/craftsman/small scale industries.

To know the pattern of flow of credit, Kendall's coefficient of concordance was worked out which was found significant (0.856) at one per cent level that indicated no change in the pattern of flow of credit in terms of accounts for various purposes during the study period.

To know the variation in the flow of credit for various purposes the coefficient of variation was also workedout. The year to year variation was higher in crop loan accounts followed by term loan accounts. It was minimum in the case of artisan/craftsmen/small scale industries.

Table 4.12. Purposewise Flow of Credit from Malaprabha Grameena Bank (1984-1994)

(In per cent)

Purpose	Accounts		Amount	
	Mean	C.V.	Mean	C.V.
1. Crop loan	24	26	38	19
2. Term loan	10	20	17	33
3. Artisan/crafts men/SSI	2	8	3	11
4. Businessmen/ road transport operators	12	16	16	11
Kendall's coefficent (w)	0.856*	-	0.900*	-

* Significant at 1 per cent level.

With respect to the purposewise loan amount, the share of crop loan was maximum while it was minimum in the case of artisans/craftsmen/Small scale industries.

The share of term loans and business/SRTO, loans was hovering around 16 per cent.

The pattern of flow of credit to different purposes remained the same over the years as was indicated by significant Kendall's coefficient of concordance (0.90). The variation in the share of term loan was maximum (33%). The year to year variation in the crop loan was 19 per cent. For other purposes the variation was only 11 per cent.

4.1.4.2 Beneficiarywise Flow of Credit

The pattern of flow of credit to different categories of beneficiaries has been depicted in the Table 4.13. It could be seen from the table that, the small farmer category accounts dominated among the borrowal accounts followed by small business/professionals. The borrower accounts of marginal farmers and agricultural labourers categories were found to be six and five per cent respectively. A lower proportion of borrower accounts was observed in the case of craftsmen/Small Scale Industries accounts.

To know the pattern of flow of credit Kendall's coefficient of concordance was worked out (0.958) which was

Table 4.13. Flow of Credit from Malaprabha Grameena Bank to Different Beneficiaries (1984-1994)

(In per cent)

Beneficiary	Accounts		Amount	
	Mean	C.V.	Mean	C.V.
1. Marginal farmers	6	16	7	22
2. Small farmers	23	23	43	17
3. Agril. labourers	5	31	5	48
4. Craftsman/SSI	2	8	3	11
5. Small business/ road transport operators	12	16	16	11
Kendall's Coefficient (w)	0.958*	-	0.982*	-

* Significant at 1 per cent level.

highly significant that indicated no change in the pattern of flow of credit to different beneficiaries accounts during the study period.

The coefficient of variation indicated a higher level of year to year variation in the case of agricultural labourers accounts followed by small farmers accounts. The same variation in the case of marginal farmers accounts and small business/professionals was found which was 16 per cent. A least variation was observed in the case of craftsman/Small Scale Industries accounts.

In respect of beneficiarywise flow of loan amount, small farmers category received a major share followed by small businessmen/professionals, marginal farmers, agricultural labourers and the least share was obtained by the craftsman/Small Scale Industries category borrowers.

The value of the Kendall's coefficient of concordance (0.982) indicated no change in the pattern of flow of credit to different beneficiaries in the study period.

The coefficient of variation values indicated maximum variation in respect of agricultural labourers, followed by marginal farmers and small farmers categories. The variation in the case of craftsmen/Small scale industries and small businessmen/professionals was 11 per cent.

4.1.4.3 Degree of Concentration of Credit-Gini coefficient Analysis

The Gini coefficients for the flow of credit from Malaprabha Grameena Bank both purposewise and beneficiaries wise has been depicted in the Table 4.14 and Fig 4.8 and 4.9. The aim of this analysis was to estimate and analyse the extent and direction of change in the flow of credit. In otherwords to know whether the bank has concentrated on a particular purpose or category over the years rather than equitable distribution.

The Gini coefficient or inequality index has consistently declined from 0.16 in the year 1984 to 0.11 for the year 1994, in the case of beneficiarywise distribution of credit facilities. For the overall period of 1984 to 1994 the Gini coefficient was found to be 0.12.

In the case of purposewise flow of credit, the Gini coefficients were observed to be 0.04 in the year 1984 and declined to 0.02 for the year 1994, which has indicated a consistent reduction. The Gini coefficient for the overall period of 1984 to 1994 was found to be 0.02.

Though the Gini coefficient values were found to be lower both beneficiarywise and purposewise in the individual years as well as for the overall period, however, the degree of inequality was found to be lower in the case of purposewise flow of credit as compared to beneficiarywise flow of credit.

Table 4.14. Gini Coefficients for Flow of Credit from Malaprabha Grameena Bank

Particulars	1984	1994	1984-94
1. Purposewise	0.04	0.02	0.02
2. Benefeciarywise	0.16	0.11	0.12

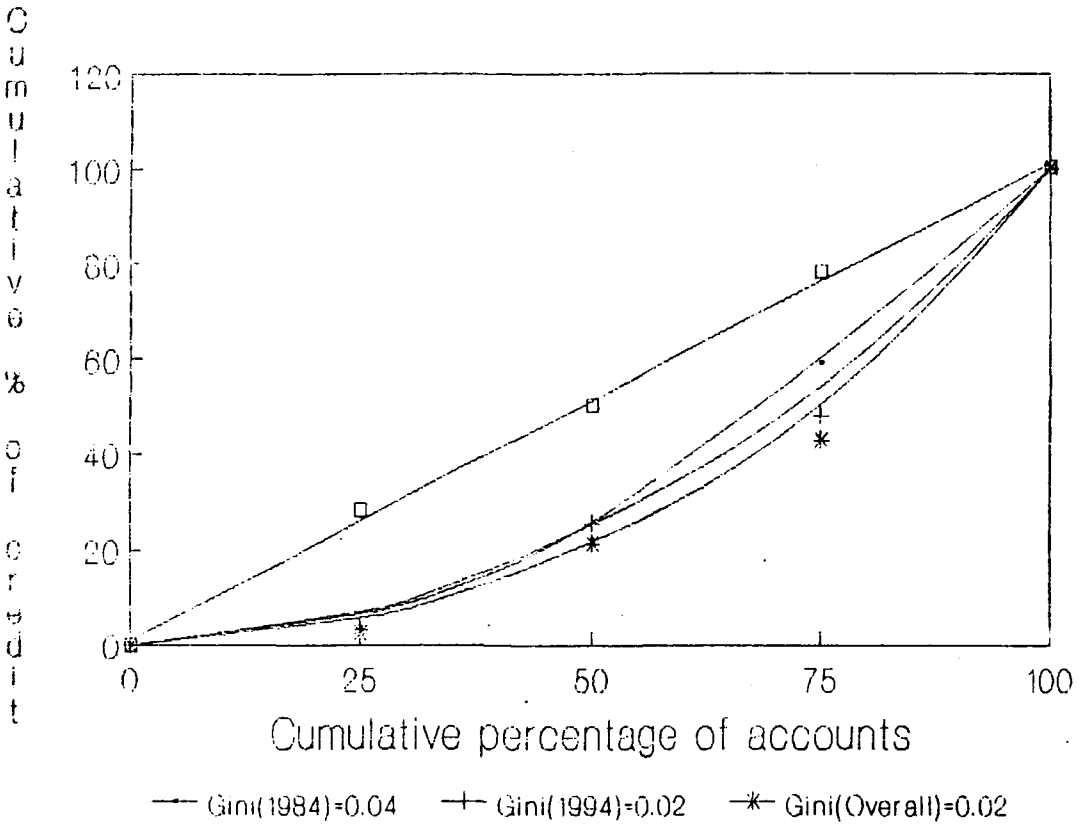

Fig.4.8 Lorenz Curves (Purposewise)

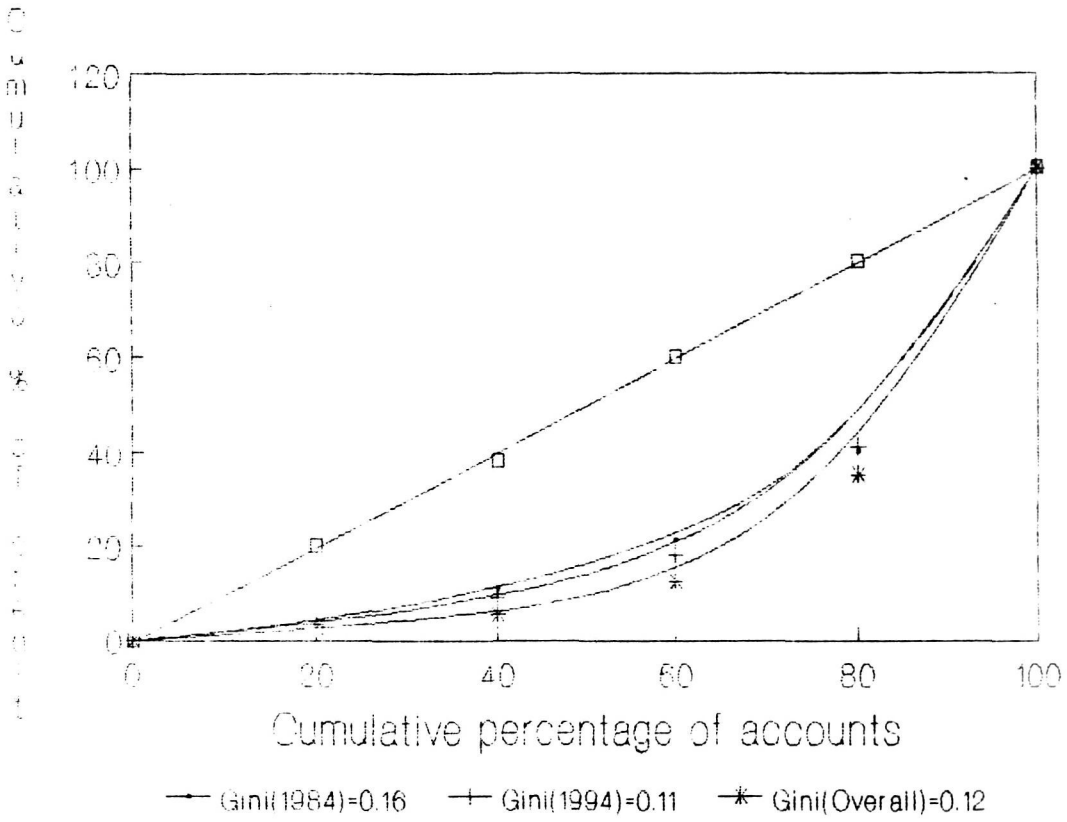

Fig 4.9 Lorenz Curves (Beneficiarywise

4.1.4.4 Pattern of Deposit Mobilisation

Another striking measure to determine the success or efficiency of any credit agency is the extent to which it is able to mobilise the savings of the community in the form of deposits.

The major components of deposits of the Malaprabha Grameena Bank were fixed deposit, savings bank deposit and current deposits. Table 4.15 revealed that fixed deposits constituted a lion share of the total deposits of the bank and it's share varies from 59 to 63 per cent, followed by savings bank deposit 35 to 39 per cent. The share of current deposits of the bank revolved around 1.5 per cent with a range of 1.22 per cent to 1.70 per cent.

In the case of fixed deposits, an increasing trend was observed during the period under consideration. The magnitude of fixed deposits increased from Rs. 4201.37 lakhs in 1990 to Rs. 9005.02 lakhs during the year 1994. During the above period, the fixed deposits registered the highest per cent growth (31 per cent) in 1994 and the growth was found to be the lowest (11 per cent).

Savings deposits also showed an increasing trend during the period 1990 to 1994. The amount of deposits increased from Rs. 2434.08 lakhs in 1990 to Rs. 5301.67 lakhs in the year 1994. The highest growth of savings deposits (43 per cent) was

Table 4.15. Composition of Deposits of Malaprabha Grameena Bank

(Rs. in lakhs)

Year	Fixed deposits	Growth over previous year(%)	Savings deposits	Growth over previous year(%)	Current deposits	Growth over previous year(%)	Total deposits	Growth over previous year(%)
1990	4201.37 (62.54)	18	2434.08 (36.24)	27	82.03 (1.22)	51	6717.48 (100.00)	21
1991	4659.30 (63.00)	11	2635.83 (35.64)	9	100.28 (1.36)	22	7395.41 (100.00)	10
1992	5638.51 (59.21)	21	3757.50 (39.46)	43	127.04 (1.33)	27	9523.05 (100.00)	29
1993	6897.38 (63.16)	22	3860.39 (35.35)	3	162.75 (1.49)	29	10920.52 (100.00)	15
1994	9005.02 (61.87)	31	5301.67 (36.43)	37	247.83 (1.70)	52	14554.52 (100.00)	33

Note : Figures in the parentheses indicate percentage to total deposits.

seen in the year 1992 and the lowest was observed (3 per cent) in the year 1993.

The current deposits exhibited a positive trend over the years and the quantum of current deposits increased from Rs. 82.03 lakhs to Rs. 247.83 lakhs from the year 1990 to 1994. This type of deposits recorded the highest growth of 52 per cent in the year 1994 and on the contrary the lowest growth of 22 per cent was seen in 1991.

So far as total deposits were concerned, they increased over the years from Rs. 6717.48 lakhs to Rs. 14554.52 lakhs between 1990 and 1994. The highest growth was seen in 1994 and the growth was the lowest in the year 1991.

4.1.5 Measurement of Branch Performance

The efficiency of business organisation can be measured by various quantitative and qualitative indicators of development which may consider only one or two aspects of growth. Hence, it becomes difficult to arrive at a conclusion on the overall performance of the organisation. To overcome this difficulty an attempt was made to develop a methodology based on scaling technique which can incorporate multidimensional aspect of the performance and group the branches as good, satisfactory and poor.

In all, 20 variables comprising of nine physical and eleven financial indicators were considered for 14 branches selected at random and the results are indicated in the Table 4.16. It could be seen from the table that six branches were grouped under good category, four branches each under satisfactory and poor category. The average percentile score of good category branches ranged from 11.211 to 14.826 and for satisfactory branches it was ranging between 8.790 to 10.415. In the case of poor category branches, the percentile score was found to be between 3.872 to 6.971.

In the Table 4.17, the of physical variables for all the three groups were given, which helps to test the validity of the scale. It could be seen from the table that the mean values of good branches were higher as compared to satisfactory and poor branches were respect to the variables viz., staff, deposit accounts, deposit accounts per employee, outstanding advances accounts, advances accounts per employee, total business accounts , agricultural advances accounts and allied advance accounts. On the contrary, only productivity variable was found to be having higher mean value in the satisfactory branches followed by good and poor branches.

The mean of financial variables for the three category branches has been shown in the Table 4.18. The table revealed that, the mean values of good branches were higher as compared to satisfactory and poor branches in respect of variables,

Table 4.16. Average Percentile Score of each Selected Branch of Malaprabha Grameena Bank (1994)

Sl. No.	Name of the Branch	Average percentile score	Class
1.	K.K. Koppa	14.8262	
2.	Handigund	13.4873	
3.	Khanagoan	13.1969	
4.	Noolvi	12.6576	
5.	Negalur	11.8778	
6.	Arawatagi	11.2111	Good
7.	Haranagiri	10.4150	
8.	Nesaragi	10.2177	
9.	Arekurahatti	9.8829	
10.	Galagihulakoppa	8.7901	Satisfactory
11.	Sirasangi	6.9712	
12.	Khilegoan	4.6493	
13.	Malabad	4.3271	
14.	Amargol	3.8724	Poor

Table 4.17. Mean Values of the Physical Variables

Variables	Good Branches	Satisfactory Branches	Poor Branches
Staff	5.67	5.00	4.50
Deposit accounts	3213.17	3079.00	1998.50
Deposit accounts/Employee	571.08	515.34	447.35
Advances	928.67	774.25	554.00
Advances per Employee	165.46	160.36	122.10
Total Business	4141.83	3853.25	2552.50
Productivity	736.58	790.25	569.46
Agricultural advance	146.33	112.75	60.50
Allied advances	32.67	13.75	17.50

Table 4.18. Mean Values of the Financial Variables

Variables	Good Branches	Satisfactory Branches	Poor Branches
Deposit Amount	62.42	57.46	28.56
Deposits per employee	10.75	11.17	6.37
Advances	63.89	50.56	35.83
Advances per Employee	11.29	10.27	7.81
Total Business	126.31	108.01	64.39
Productivity	22.04	21.44	14.18
Agricultural advances	18.37	13.19	7.96
Allied advances	1.95	0.53	0.83
Profit or loss	-0.33	0.18	-0.40
Overdues	25.78	20.22	11.86
Recovery (per cent)	58.17	45.75	48.75

namely deposit amount, advances, advances per employee, total business, productivity, agricultural advances, allied advances, overdues and recovery percentage. The variables, viz., deposit per employee and profit had higher mean values in the case of satisfactory branches. None of the variables had higher mean values in the case of poor branches.

The mean differences and CD values for different categories of branches relating to physical variables were given in the Table 4.19. It was found that, there was a significant mean difference between good performance and poor performance branches for the variables as deposit accounts, advance accounts, total business accounts and agricultural advance accounts. However no significant difference was observed with respect to staff, deposit account per employee, advance accounts per employee, productivity account and allied activity accounts. Between satisfactory and poor branches only two variables were found to discriminate the branches They were deposit accounts and total business accounts. However, no significant difference was seen between good and satisfactory branches with respect to any variables.

In the case of financial indicators, (Table 4.20) four variables namely advance amount, advance amount per employee, productivity amount and allied activity advances were found to be significantly discriminating the good and poor performing branches. The remaining financial variables such as deposit

Table 4.19. Mean Differences of Different Categories of Branches (Physical Indicators)

Sl. No.	Variables	Mean difference 1 & 2	Mean difference 1 & 3	C.D. values at 1%	C.D. values at 5%	Mean diff. 2 & 3	C.D. values at 1%	C.D. values at 5%
1	Staff	0.667	1.167	1.746	1.237	0.500	1.912	1.355
2	Deposit Accounts	134.167	1214.667*	1279.427	906.670	1080.500*	1401.590	993.207
3	Deposit Accounts/employee	55.737	123.724	186.388	132.080	67.987	204.178	144.686
4	Advance Accounts	154.417	374.667**	317.497	224.987	220.250	347.800	246.460
5	Advance Accounts/employee	5.097	43.352	68.766	48.729	38.255	75.329	53.380
6	Total Business Account	288.584	1589.334**	1402.131	993.590	1300.750*	1535.958	1088.424
7	Productivity Account	-53.670	167.122	295.263	209.231	220.792	323.443	229.201
8	Agricultural Advance Account	33.583	85.830*	109.024	77.258	52.250	119.430	84.631
9	Allied Activity Advance Account	18.917	15.167	30.818	21.839	-3.750	33.760	23.923

** - Significant at 1% level

* - Significant at 5% level

Table 4.20. Mean Differences of Different Categories of Branches (Financial Indicators)

Sl. No.	Variables	Mean difference 1 & 2	1 & 3	C.D. values at 1%	5%	Mean diff 2 & 3	C.D. values at 1%	5%
1	Deposit Amount	4.960	33.859	51.432	36.446	28.899	56.341	39.920
2	Deposit Amount/Employee	-0.424	4.380	8.136	5.765	4.804	8.912	6.315
3	Advance Amount	13.337	28.059**	20.561	14.570	13.337	22.523	15.961
4	Advance Amonut/Employee	1.020	3.478**	2.518	1.784	2.458*	2.758	1.954
5	Total Business Amount	18.279	61.902	60.424	42.818	43.623	66.191	46.905
6	Productivity Amount	0.596	7.857**	7.056	5.000	7.261*	7.730	5.478
7	Agricultural Advances	5.176	10.410	16.179	11.465	5.234	17.724	12.559
8	Allied Activities Advances	1.422	1.114*	1.276	0.904	-0.308	1.398	0.990
9	Profit or Loss	-0.062	-0.220	4.256	3.016	-0.158	4.662	3.304
10	Overdues	5.554	13.942	19.802	14.032	8.388	21.692	15.372
11	Recovery Per cent	12.417	9.417	31.989	22.669	-3.000	35.043	24.832

** - Significant at 1% level

* - Significant at 5% level

amount, deposit amount per employee, total business amount, agricultural advances, profit or loss, overdues and recovery per cent were found to be non significant.

In the case of satisfactory and poor category branches, only two variables namely outstanding advance per employee and productivity amount were found to be significant. No significant difference was observed between good and satisfactory branches with respect to any of the financial variables similar to that of physical variables.

4.1.6 Capital Adequacy Level of the Bank

The details of capital adequacy of the Malaprabha Grameena Bank, Dharwad were shown in the Table 4.21. The results revealed that, the risk weighted assets were found to be increasing over the years from 1991-92 to 1998-99 both in the actual period and projected period. The working capital position of the bank as well as revaluation potential of the bank also has shown increasing trend. The bank has been found to be possessing working capital above the norm of eight per cent of risk weighted assets prescribed by the Reserve Bank of India both in the actual period as well as in the projected period. The bank has excess working capital of Rs. 13369 lakhs in 1991-92 and this has increased to Rs. 18663 lakhs in 1993-94. The projected figures also ranged from Rs. 23575 lakhs in 1994-95 to Rs. 61387 lakhs in the year 1998-99.

Table 4.21. Capital Adequacy Analysis of Malaprabha Grameena Bank

(Rs. in lakhs)

Sl. No.	Particulars	Actuals			Projections				
		1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
1.	Risk Weighted Assets	7915	8812	10865	12742	14942	17523	20550	24099
2.	Required working capital @ 8% as per RBI norms [8% of Col. (1)]	633	704	869	1019	1195	1401	1644	1927
3.	Working capital position of MGB	14016	15757	19602	24796	31077	39766	50914	65501
4.	Excess working capital [Col. (3) - Col. (2)]	13383	15053	18733	23750	29882	38365	49270	63574
5.	Revaluation potential	14	35	70	175	350	875	1750	2187
6.	Gap between required and actual capital [Col. (4) - Col (5)] as excess capital	+13369	+15018	+18663	+23575	+29532	+37490	+47520	+61387

4.1.7 Break-Even Volume of Business

The Break-even volume of business of the Malaprabha Grameena Bank for the year 1991-92 to 1993-94 (actuals) and the projections for the future upto 1998-99 are presented in the Table 4.22. The table revealed that the transaction costs, incremental risk cost and miscellaneous income found to be increasing during the period 1991-92 to 1993-94. The financial margin has declined from 3.72 to 3.36 from the year 1991-92 to 1992-93 and increased once again to 4.65 in the year 1993-94. The break-even volume of business of the bank was more in the year 1992-93 compared to 1991-92 and 1993-94 and the bank was operating below the break-even volume of business in the first two years and achieved this volume of business in the year 1993-94.

Projections were made in respect of the parameters relating to the break-even volume of business for the years 1994-95 to 1998-99. During this period the transaction cost, miscellaneous income, financial margin and working funds were found to be decreasing. The break even volume of business was found to be declined from 1994-95 to 1995-96 and from the years 1996-97, once again started increasing. In these projected years the bank would be functioning above the break even volume of business.

Table 4.22. Break-even Volume of Business of Malaprabha Grameena Bank

(Rs. in lakhs)

Sl. No.	Particulars	Present position (Actuals)		Future Projections				
		1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
1.	Trasanction cost	775.05	975.90	1079.67	1205.16	1376.55	1606.89	1915.23	2329.32
2.	Incremental Risk cost	1.22	2.56	9.63	233.72	120.00	150.00	150.00	200.00
3.	Miscellaneous income	78.98	125.71	187.64	250.00	275.00	300.00	325.00	350.00
4.	Financial margin per Rs. 100 of working funds	3.72	3.36	4.65	4.98	5.23	5.48	5.72	5.96
5.	Working funds	14016.44	15757.26	19602.03	24796.90	31077.64	39766.76	50914.32	65501.60
6.	Break even level working funds (1+2) - 3 / 4 x 100	18744.35	25379.46	19390.54	23873.09	23356.60	26585.58	30423.60	36565.77
7.	BEL as multiple of present working funds	1.3373	1.6107	<---------- Break Even Level Achieved ---------->					

Further, the break-even volume of business of the bank for the year 1993-94 was split into different composition of assets and liabilities to know their relative levels in the total volume of business as shown in the Table 4.23. Among the liabilities, the deposits and borrowings were found to be the most important elements. On the contrary, among the assets, the advances and balance maintained with other banks formed the major resource component of the bank.

The break-even volume of business projected for the year 1994-95 and 1998-99 were apportioned into different proportion of liabilities and assets based on the proportions observed for the year 1993-94. It could be seen from the Table 4.24 that the bank has to increase the assets as well as liabilities from 1993-94 to 1994-95 to achieve the break even level. Even the borrowings (Rs. 28.06 lakhs) were found lower from the previous year. The break-even volume of business was found to be slightly lower for the year 1994-95 compared to the preceeding year.

When a compression was made between the years 1994-95 and 1998-99, it was found that the deposits and borrowings were higher in the latter year compared to former year. The advances were also higher for the year 1998-99 compared to 1994-95. The break-even volume of business of the bank was found to be higher in 1998-99 as against 1994-95.

Table 4.23. Assets and Liabilities at Breakeven Volume of Business (1993-94)

Sl. No.	Liabilities	Rupees (lakhs)	Per cent	Sl. No.	Assets	Rupees (lakhs)	Per cent
1.	Share capital Reserves	75.04	0.32	1.	Cash and Balances	805.36	3.38
2.	Deposits	14554.52	61.16	2.	Balances with banks	6579.81	27.65
3.	Borrowings	9167.86	38.52	3.	Investments	10.00	0.05
				4.	Advances	15271.52	64.17
				5.	Other assets	1130.73	4.75
	Total Rs.	23797.42	100.00		Total	23797.42	100.00

Table 4.24. Projected Assets and Liabilities of the Bank

Sl. No.	Liabilities	1994-95	1998-99	Sl. No.	Assets	1994-95	1998-99
1.	Share capital and Reserves	76.39	117.00	1.	Cash and Balances	806.91	1235.92
2.	Deposits	14600.78	22363.63	2.	Balances with Banks	6600.91	10110.44
3.	Borrowings	9195.92	14085.14	3.	Investments	11.94	18.28
				4.	Advances	15319.36	23464.26
				5.	Other assets	1133.97	1736.87
	Total	23873.09	36565.77		Total	23873.09	36565.77

4.1.8 Relative Performance of the Bank (Principal Component Analysis)

In this study performance of the Malaprabha Grameena Bank was looked at from various angles representing both physical, financial and a combination of both.

In the present study only first three dimensions were considered because it afforded the convenience of presenting the results on one hand and on the other hand the subsequent dimensions failed to explain a sizeable proportion of the variation of the matrix considered.

4.1.8.1 Physical Indicators

To identify the physical indicators having a bearing on the performance of the bank twelve variables were subjected to principal component analysis. The first three principal components were selected for detailed analysis, since they together accounted for 79.60 per cent variation. The coefficients of the first three principal components alongwith the associated eigen values and the percentage variation was depicted in the Tables 4.25 and 4.26.

The coefficients of the eigen vector were the weights assigned to each variable. The variable which had higher weight were considered dominant in the component. It was noticed from the table that all the 12 variables were associated with the performance of the bank.

Table 4.25. Principal Components and Factor Loadings of Physical Indicators Influencing the Performance of Malaprabha Grameena Bank

Sl. No.	Variables /Indicators	Principal components I	II	III
1.	Number of employees	0.367	0.065	-0.236
2.	Number of branches	0.378	0.063	-0.196
3.	Family coverage per village	0.384	0.051	-0.134
4.	Number of villages adopted	0.376	0.128	-0.093
5.	Deposit Accounts	0.369	0.132	-0.081
6.	Advance Accounts	0.384	-0.011	-0.051
7.	Employees per Branch	-0.062	-0.142	-0.241
8.	Deposit Accounts per Branch	0.256	-0.175	0.615
9.	Advance Accounts per Branch	0.264	-0.162	0.586
10.	Deposit Accounts per Employee	-0.036	-0.162	0.129
11.	Advance Accounts per Employee	-0.072	0.627	0.221
12.	Non performing Assets Accounts	-0.061	0.678	0.158
	Eigen values (Latent Values)	6.504	1.759	1.289
	Variation explained	54.200	14.700	10.700
	Cumulative variation explained	54.200	68.900	79.600

Table 4.26. Physical Performance Indicators with High Factor Loadings of Malaprabha Grameena Bank

Code No.	First Dimension Variables/Indicators (I P.C.)	Factor Loading	Code No.	Second Dimension Variables/Indicators (II P.C.)	Factor Loading	Code No.	Third Dimension Variables/Indicators (III P.C.)	Factor Loading
3	Family coverage per village	0.384	12	Non performing Asset Account	0.678	8	Deposit Accounts per Branch	0.615
6	Advance Accounts	0.384						
2	No. of branches	0.378	11	Advance Accounts per Employee	0.627	9	Advance Accounts per Branch	0.586
4	No. of villages covered	0.376						
5	Deposit Accounts	0.369						
1	Number of employees	0.367						
	Percentage variation explained	54.20		Percentage variation explained	14.70		Percentage variation explained	10.70

Note : PC - Principal component

In the first component six variables were closely associated with the performance. They were, family coverage per village, advance accounts, number of branches, number of villages adopted, deposit accounts and number of employees recorded higher scores. The scores ranged from 0.367 to 0.384 and this component explained 54.20 per cent variation.

In the second component only two variables had higher factor loading, they were non-performing asset accounts and advance accounts per employee., This component explained 14.70 per cent of the variation.

Deposit and advance accounts per branch were the two variables which had higher scores in the third component and accounted for 10.70 per cent of the variation.

4.1.8.2 Financial Indicators

The technique of principal component analysis was also extended to identify financial indicators closely associated with the performance of the Malaprabha Grameena Bank considering 19 variables. The first three components were selected for detailed analysis and they together accounted for 90.10 per cent variation. The coefficients of the first three principal components alongwith the associated eigen values and the percentage variation was shown in the Tables 4.27 and 4.28. It was noticed from the tables that all 19 variables had their influence on the performance of the bank.

Table 4.27. Principal Components and Factor Loadings of Financial Indicators Influencing the Performance of Malaprabha Grameena Bank

Sl. No.	Variables /Indicators	Principal components I	II	III
1.	Advance Amount	-0.023	0.446	0.104
2.	Deposit Amount	-0.006	0.443	0.070
3.	Total Business	0.044	0.446	0.057
4.	Gross Income	0.070	0.440	0.049
5.	Gross expenditure	0.098	0.428	0.040
6.	Net Profit	0.292	-0.005	-0.204
7.	Overdues Amount	0.289	-0.006	-0.195
8.	Recovery Percentage	0.287	0.000	-0.183
9.	Average Advance Amount per Branch	0.304	-0.018	-0.098
10.	Average Deposit Amount per Branch	0.306	-0.021	-0.061
11.	Average Business Amount per Branch	0.307	-0.023	-0.038
12.	Average Advance Amount per Employee	0.307	-0.024	-0.021
13.	Average Deposit Amount per Employee	0.290	-0.045	0.150
14.	Refinance Amount Outstanding	0.292	-0.024	0.143
15.	Participation under Govt. Programmes	0.290	-0.032	0.105
16.	Share Capital	0.292	-0.015	0.050
17.	Non-performing Assets Amount	0.110	-0.089	0.506
18.	Credit deposit ratio	0.080	-0.092	0.586
19.	Borrowings	-0.009	-0.080	0.438
	Eigen values (Latent Values)	10.505	4.794	1.821
	Variation explained	55.300	25.200	9.600
	Cumulative variation explained	55.300	80.500	90.100

Table 4.28. Financial Performance Indicators with High Factor Loadings of Malaprabha Grameena Bank

Code No.	First Dimension Variables/Indicators (I P.C.)	Factor Loading	Code No.	Second Dimension Variables/Indicators (II P.C.)	Factor Loading	Code No.	Third Dimension Variables/Indicators (III P.C.)	Factor Loading
11	Business Amount per Branch	0.307	1	Advance Amount	0.446	18	Credit deposit ratio	0.586
12	Advance Amount per Employee	0.307	3	Total Business	0.446	17	Nonperforming Assets Amount	0.506
10	Deposit Amount per Branch	0.306	2	Deposit Amount	0.443			
9	Advance Amount per Branch	0.304	4	Gross Income	0.440	19	Borrowings	0.438
6	Net Profit	0.292	5	Gross expenditure	0.428			
14	Refinance Amount Outstanding	0.292						
16	Share Capital	0.292						
13	Deposit Amount per Employee	0.290						
15	Participation under Government Programmes	0.290						
7	Overdues Amount	0.289						
8	Recovery Percentage	0.287						
	Percentage variation explained	55.30		Percentage variation explained	25.20		Percentage variation explained	9.60

Note : PC - Principal Component

In the first component, 11 variables were closely associated with the performance of the bank and they were business amount per branch, advance amount per employee, deposit amount per branch, advance amount per branch, net profit, refinance, share capital, deposit amount per employee, participation under Government programmes, overdues and recovery per cent. The scores were ranged from 0.287 to 0.307 and the component accounted for 55.30 per cent variation.

Five variables were found in the second component, namely, advance amount, total business, deposit amount, income and expenditure. This component explained 25.20 per cent of the variation.

Third component explained 9.60 per cent variation with only three variables such as credit-deposit ratio, non performing asset amount and borrowings with the scores ranging from 0.438 to 0.586.

4.1.8.3 Pooled Analysis of Physical and Financial Indicators

The technique of principal component analysis was applied to isolate the influence of physical and financial indicators/variables on the performance of Malaprabha Grameena Bank. The first three components were selected for detailed analysis as they accounted for 88.70 per cent of the variation. The details of the coefficient of the components alongwith the associated eigen values and percentage variation was shown in the Tables 4.29 and 4.30.

Table 4.29. Principal Components and Factor Loadings of Physical and Financial Indicators Influencing the Performance of Malaprabha Grameena Bank

Sl. No.	Variables /Indicators	Principal components I	II	III
1.	Number of employees	0.119	-0.183	0.091
2.	Number of branches	0.169	-0.184	0.133
3.	Family coverage per village	0.168	-0.182	0.128
4.	Number of villages covered	0.208	-0.165	0.151
5.	Deposit Accounts	0.095	0.125	-0.253
6.	Advance Accounts	0.140	0.150	-0.261
7.	Average Employees/Branch	0.166	0.160	-0.253
8.	Average Deposit Account/Branch	0.189	0.151	-0.239
9.	Average Advance Accounts/Branch	0.202	0.138	-0.220
10.	Average Deposit Accounts/Employee	0.226	0.110	-0.178
11.	Average Advance Accounts/Employee	0.239	0.092	-0.137
12.	Non performing Assets Accounts	0.249	0.067	-0.119
13.	Advance Amount	0.260	0.045	-0.092
14.	Deposit Amount	0.272	-0.007	-0.033
15.	Total Business	0.272	-0.013	-0.022
16.	Gross Income	0.273	-0.011	-0.021
17.	Gross expenditure	0.271	0.004	-0.034
18.	Net Profit or loss	0.199	-0.174	0.177
19.	Overdues Amount	0.199	-0.167	0.191
20.	Recovery Percentage	0.199	-0.164	0.195
21.	Average Advance Amount /Branch	0.200	-0.160	0.198
22.	Average Deposit Amount/Branch	0.201	-0.155	0.201
23.	Average Business Amount/Branch	0.005	0.241	0.233
24.	Average Advance Amount/Employee	0.010	0.241	0.228
25.	Average Deposit Amount/Employee	0.019	0.259	0.230
26.	Refinance Amount Outstanding	0.043	0.263	0.177
27.	Participation under Govt. Programmes	0.059	0.270	0.164
28.	Share Capital	0.042	0.256	0.214
29.	Nonperforming Assets Amount	0.056	0.263	0.199
30.	Credit deposit ratio	0.064	0.266	0.187
31.	Borrowings	0.073	0.271	0.182
	Eigen values (Latent Values)	13.016	9.283	5.187
	Variation explained	42.000	29.900	16.700
	Cumulative variation explained	42.000	71.900	88.700

Table 4.30. Performance Indicators with High Factor Loadings of Malaprabha Grameena Bank

First Dimension (I PC)			Second Dimension (II PC)			Third Dimension (III PC)		
Code No.	Variables/ Indicators	Factor Loading	Code No.	Variables/ Indicators	Factor Loading	Code No.	Variables/ Indicators	Factor Loading
16	Gross Income	0.273	31	Borrowings	0.271	7	Employees per Branch	-0.253
14	Deposit amount	0.272	27	Participation in Govt. prog.	0.270	8	Deposit A/c per Branch	-0.239
15	Total business	0.272	30	Credit deposit ratio	0.266	9	Advance A/c per Branch	-0.220
17	Gross expenditure	0.271	26	Refinance outstanding	0.263			
13	Advance amount	0.260	29	Non-performing assets amount	0.263			
12	Non performing asset A/c	0.249	25	Deposit amount per employee	0.259			
11	Advance A/c per employee	0.239	28	Share capital	0.256			
10	Deposit A/c per employee	0.226	23	Business amount per Branch	0.241			
4	Number of villages adopted	0.208	24	Advance amount per employee	0.241			
22	Deposit amount per Branch	0.201	2	Number of branches	-0.184			
21	Advance amount per Branch	0.200	1	Number of employees	-0.183			
18	Net profit or Loss	0.199	3	Family coverage per village	-0.182			
19	Overdues amount	0.199						
20	Recovery percentage	0.199						
	Percentage variation explained	42.00		Percentage variation explained	29.90		Percentage variation explained	16.70

Note : PC - Principal component.

The tables revealed that, 14 variables were closely associated with the performance of the bank in the first component. Out of which, four variables were physical indicators and remaining ten were financial indicators. The variables appeared in the first component were, gross income, deposit amount, total business, gross expenditure, advances, non-performing asset accounts, advance account/employee, deposit account/employee, number of villages adopted, deposit/branch, advance/branch, net profit, overdues amount and recovery percentage. The scores were ranging from 0.199 to 0.273 and the component accounted for 42 per cent variation.

In the second component three physical variables and nine financial variables were found, namely; borrowings, participation in Government programmes, credit-deposit ratio, refinance, non-performing asset amount, deposit/employee, share capital, business/branch, advance/employee, number of branches, number of employees and family coverage per village. The scores of the variables ranged between -0.182 to 0.271 and the component was able to explain 29.90 per cent of the variation.

The third principal component explained 16.70 per cent of the variation with only three physical variables, namely number of employees/branch, deposit accounts and advance accounts per branch. This component was able to explain 16.70 per cent of the total variation.

4.1.9 Overdues of the Bank

The management of the bank was interested to keep the overdues at the minimum possible level. One of the most disquieting features of the agricultural credit structure in India is the incidence of ever increasing overdues. The overdues adversely affect the liquidity of the lending agency and their capacity to maintain and expand farm credit. In this study an attempt was made to analyse the overdues in all perspective.

4.1.9.1 Demand, Balance and Recovery position of Malaprabha Grameena Bank

The demand, balance and recovery position of Malaprabha Grameena Bank over the years from 1982 to 1994 has been presented in the Table 4.31.

The demand for the collection of advanced funds was found to be increasing continuously over the years except in 1992. The recovery of funds showed an increasing trend from 1982 to 1988, but declined in the next two years and picked up afterwards. The level of overdues increased consistently from 1982 to 1990, but declined in 1991 and increased once again. The overdues percentage to demand did not show any particular phenomenon, but a declining trend was noticed, since 1990. The percentage has increased from 32.73 per cent in 1982 to 44.38 per cent in 1994 accounting for 11.65 per cent increase over

Table 4.31. Demand, Recovery and Balance position of Malaprabha Grameena Bank
(Rs. in lakhs)

Years	Demand	Collection/ Recovery	Overdues	% OD to Demand	% change in overdues over previous year
1982	996.00	670.00	326.00	32.73	65
1983	1474.74	899.59	575.15	39.00	76
1984	1878.54	1114.54	764.00	40.67	33
1985	2431.06	14634.42	967.64	39.80	27
1986	3454.91	1838.78	1616.13	46.78	67
1987	4940.90	2387.16	2553.74	51.69	58
1988	5939.91	3008.77	2931.14	49.35	15
1989	7316.92	2929.08	4387.84	60.00	50
1990	8810.60	2509.85	6300.75	71.51	44
1991	10632.27	5784.82	4847.45	45.60	-23
1992	10024.01	4463.88	5560.13	55.47	15
1993	11221.67	5083.54	6138.13	54.70	10
1994	14575.18	8106.39	6468.79	44.38	5

the base year. When the per cent change in overdues was worked out, it was seen that except 1992 in all the years the overdues found to be increasing. The magnitude was minimum from 1991-94.

4.1.9.2 Agewise and Sectorwise Overdues of Malaprabha Grameena Bank

The details of agewise and sectorwise overdues of Malaprabha Grameena Bank for the year 1991-92 to 1993-94 were shown in the Table 4.32. It could be seen from the table that, the overdues upto one year had declined in the year 1992-93 compared to 1991-92. Where as the overdues of more than one year had increased and was highest (29.03%) in overdues above five years followed by overdues (21.58%) between three to five years. The minimum percentage increase was in the case of overdues between one to three years.

Between 1992-93 and 1993-94 the overdues upto one year had shown an increasing trend and the extent of increase was 33.06 per cent. The other category overdues found to be declining and the overdues between three to five years declined at a faster rate (11.71%) compared to overdues of above five years and overdues of one to three years.

The sectorwise overdues indicated a positive change between 1991-92 and 1992-93 and the agricultural sector overdues was higher (19.43) compared to non-agricultural sector (18.82%) overdues. However, the other category overdues showed

Table 4.32. Agewise and Sectorwise Overdues of Malaprabha Grameena Bank

(Rs. in lakhs)

Sl. No.	Particulars	1991-92	1992-93	Change over previous year (%)	1993-94	Change over previous year (%)
I.	Agewise					
1.	Overdues upto 1 year	1010.13	856.73	-15.19	1140.00	27.81
2.	Overdues between 1-3 years	2327.01	2517.10	8.17	2400.00	-4.65
3.	Overdues between 3-5 years	1397.36	1698.97	21.58	1500.00	-11.71
4.	Overdues above 5 years	825.63	1065.33	29.03	960.00	-9.89
II.	Sectorwise					
1.	Agricultural	3105.17	3708.48	19.43	3480.00	-6.16
2.	Non-agricultural	653.40	776.35	18.82	720.00	-7.26
3.	Others (IFAL + NPA)	1801.56	1653.30	-8.23	1800.00	8.87
	Total Overdues	5560.13	6138.13	10.40	6000.00	-2.25

a declining phenomenon. Between the period 1992-93 and 1993-94, interestingly it was found that both agricultural and non agricultural overdues declined, where in the rate of decline was higher in the latter case compared to the former. The other category overdues on the contrary had increased to the extent of 8.87 per cent.

4.1.9.3 Activitywise Overdues of the Bank

A perusal of the Table 4.33 reveals the details of activitywise overdues position of the Malaprabha Grameena Bank for the years 1991-92 to 1993-94. The results revealed that the overdues in respect of small scale/cottage industries (212.4%), allied activities (25.72%), agricultural investment (22.43%), short term credit (17.49%) and retail trade (5.08%) had increased. On the contrary, the overdues in regard to non-performing assets and indirect advances had declined.

A comparison of 1992-93 and 1993-94 indicated that the overdues in respect of indirect advances (17.59%), agricultural investment (13.50%) and other category (8.81%) had increased. The overdues of activities relating to small scale industries (-20.12%), short term credit (-10.59%), allied activities (-10.25%) and retail trade (-4.55%) declined. The overdues for all activities had declined by 2.25 per cent between the years 1992-93 and 1993-94, as compared to 1991-92 and 1992-93 which had shown an increase of 10.40 per cent.

Table 4.33. Activity-wise Overdues of Malaprabha Grameena Bank

(Rs. in lakhs)

Sl. No.	Particulars	1991-92	1992-93	Change over previous year (%)	1993-94	Change ove previous year (%)
1.	Short-term-seasonal Agri-cultural operations	2153.29	2529.90	17.49	2262.00	-10.59
2.	Agricultural Investment	550.93	674.52	22.43	765.57	13.50
3.	Allied Activities	400.95	504.06	25.72	452.39	-10.25
4.	Small scale/cottage industries	43.28	135.21	212.40	108.00	-20.12
5.	Retail trade/Small Business	610.12	641.14	5.08	612.00	-4.55
6.	Others (Non-performing Assets)	1788.37	1640.28	-8.28	1784.73	8.81
7.	Indirect	13.19	13.02	-1.29	15.31	17.59
	Total overdues	5560.13	6138.13	10.40	6000.00	-2.25

4.1.9.4 Overdues Analysis of willful and Non-willful Defaulters (Discriminant Function Approach)

Recycling of funds has been one of the major determinants of credit expansion. Recovery performance makes any financial institution more viable and self-sustainable. But there has been a tendency with the borrowers not to repay their loans, there by, increasing overdues year after year. An attempt was made to examine this distressing trend which deserve to be probed in detail to classify the borrowers according to their willingness to repay the loans on the basis of selected socio-economic characteristics of the borrowers.

Five characteristics of the defaulters considered for classification were listed in the Table 4.34, together with the means and their difference for two groups of willful and non-willful defaulters.

The discriminant function used for the data was :

$$Z = 0.7410\ X_1 + 0.6711\ X_2 + 0.004\ X_3 - 0.0012\ X_4 - 0.0002\ X_5$$

It was observed from the Table 4.34, that, education and income levels were the major characteristics classifying the borrowers into willful and non-willful defaulters. Their respective powers in discriminating the two groups were 59.33 per cent and 21.42 per cent respectively. The 't' test significance of the mean differences among five characteristics

Table 4.34 Percentage Contribution of Individual Characteristics to the Total Distance Measured.

Sl.No	Characteristics	Coefficient (L_i)	Mean difference (d_i)	Coefficient X Mean difference (L_i X d_i)	Percentage relative contribution
1.	Education	0.7410	-4.15* (8.246)	-3.075	59.33
2.	Family Size (No)	0.6711	-0.45* (2.774)	-0.302	5.83
3.	Income level (Rs)	0.0004	-2775.0 (1.212)	-1.110	21.42
4.	Family expenses (Rs)	-0.0012	275.00 (0.173)	-0.330	6.37
5.	Amount of overdues (Rs)	-0.0002	1822.53	-0.365	7.05
				-5.182	100.00

Note : Figure given in the parentheses are the calculated 't' values.
* Indicates significant at 1 per cent level.

showed that the mean differences of education and family size for the two groups were significantly different.

The discriminant function was tested for its significance to examine whether the characteristics considered together were sufficiently discriminating the willful and non-willful defaulters or not. It was found that, D^2 and variance ratio were 1.285 and 4.876 respectively. Since the tabulated value of F at 5 and 74 degrees of freedom was 3.30, the discriminant function was significant.

Further, the discriminant function was used to predict whether a defaulter could be likely a willful or non-willful defaulter by calculating the discriminating scores. The mean value of non-willful defaulter (Z_1) was 2.105 while it was 6.088 for (Z_2) willful defaulters.

The critical mean value (Z) for the two groups was 4.0965. The 'Z' scores were calculated for the borrowers and if the value was more than the critical mean (4.0965), then the borrower was classified as willful defaulter. Otherwise he was likely to be a non-willful defaulter. Thus higher value of Z correspond to willful defaulters and lower value to non-willful defaulters.

The discriminant function was then applied to the sample defaulters to know the proportion of rightly classified defaulters and the results were indicated in the Table 4.35.

Table 4.35 Comparison of the Classification of Defaulters

Defaulters category	Actual Classification	Classification according to the function	Number of defaulters misclassified	Percentage of misclassified defaulters
Non-willful defaulters(No)	40	32	8	20.00
Willful defaulters(No)	40	38	2	5.00
Total	80	70	10	12.50

The table revealed that, according to the actual classification, 40 defaulters in each category were included. The discriminant function classified 32 defaulters as non-willful defaulters and 38 defaulters as willful defaulters. The percentage of misclassification of the defaulters under the non-willful category was 20 per cent where as it was only 5 per cent in willful category. On an average, 12.5 per cent of the defaulters were missclassified by the discriminant function used.

4.1.10 Association between Managerial Efforts and Business Performance

The possible influence exerted by the qualitative variables on growth indicators has been presented in the Table 4.36 and Fig 4.10. It could be seen from the table, that out of the total 68 circulars issued during 1991-92 more number of circulars were related to advances (38) followed by public relation, planning and development (14). About nine and seven circulars were issued related to human resource and credit policy and statistics.

The deposits of the bank were little less than Rs. 100 crores where as the advances crossed Rs. 100 crores. The productivity per employee indicated little less than one crore and recovery per cent was 44.53 per cent during 1991-92.

Table :4.36 Number of Circulars issued and Business Performance of Malaprabha Grameen Bank

Particulars	91-92	92-93	93-94
Number of Circulars			
1 Personnel and Secretarial	9	59	57
2 Public relation, planning and development	14	52	41
3 Advances	38	41	26
4 Accounts and recovery	7	52	57
5 Credit Policy and statistics	--	46	83
Growth Indicators			
1 Deposits (Rs. in Crores)	95.23	109.20	145.54
2 Advances (Rs. in Crores)	100.33	116.96	152.71
3 Total Business (Rs. in Crores)	195.56	226.16	298.25
4 Productivity (Rs. in Lakhs)	94.02	108.74	143.39
5 Recovery (%)	44.53	45.30	55.62

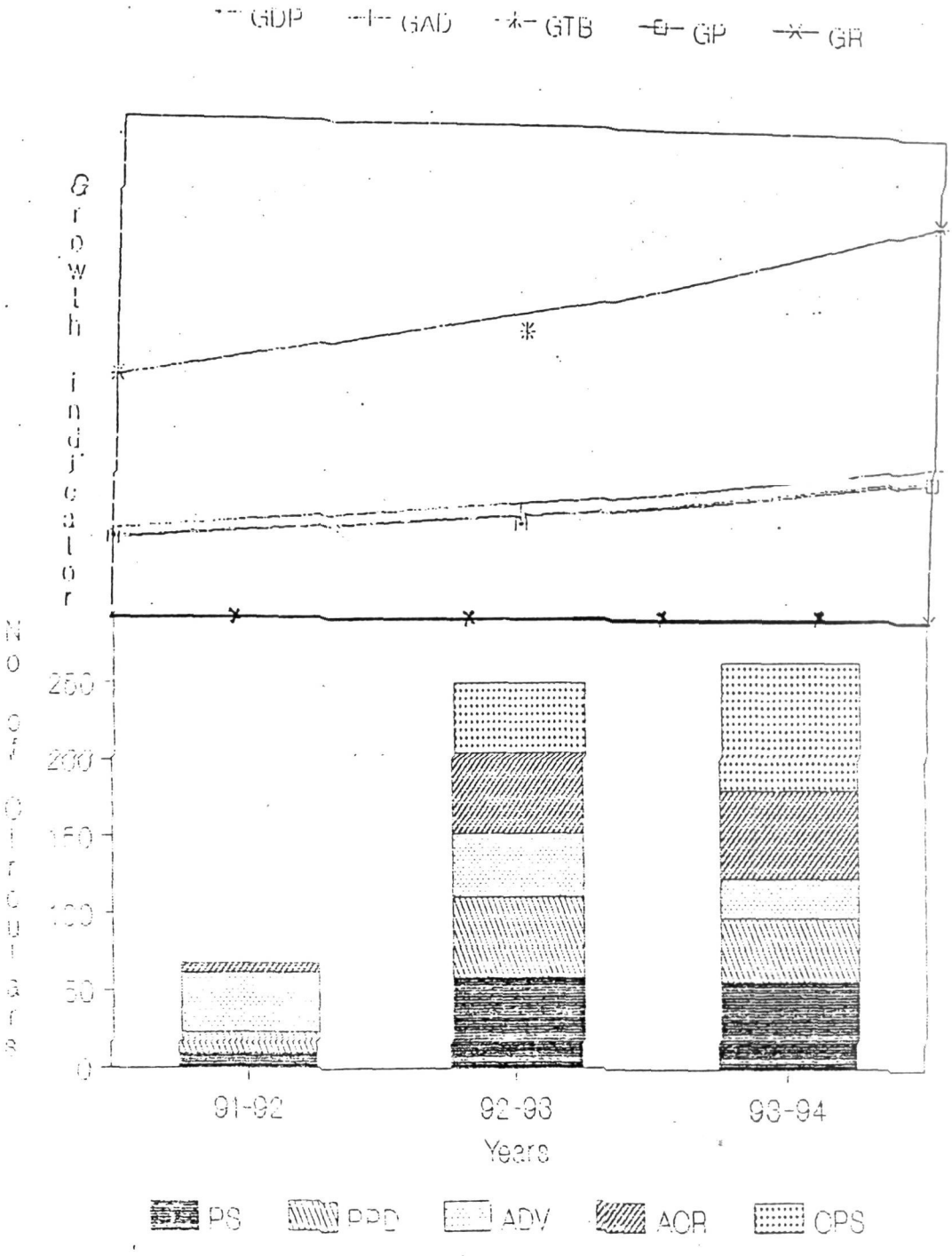

Fig 4.10. Association between managerial efforts and business performance

During the year 1992-93 out of the total 250 circulars, almost equal importance was given on all aspects as evident from the number of circulars related to each aspect. However, little more emphasis was attached to human resource development. Planning and development as well accounts and recovery received equal attention by the bank management.

As a result, the deposits and advances crossed Rs. 100 crores while the total business surpassed Rs. 200 crores, improving productivity of employees taking to more than one crore. At the same time recovery also improved considerably.

In the following year, a total of 264 circulars were issued, out of which more emphasis was given to credit policy, human resource development and accounts and recovery matters. As a consequence, the deposits reached Rs. 145.54 crores, advances Rs. 152.71 crores and total business touched as high as Rs. 298.25 crores. The productivity of the employees was Rs. 1.43 crores and recovery has been 55.62 per cent.

4.2 IMPACT OF MALAPRABHA GRAMEENA BANK

4.2.1 Credit Share of Malaprabha Grameena Bank

An attempt was made to assess the share of Malaprabha Grameena Bank in the district credit plans in it's operational districts namely Belgaum and Dharwad for the years 1989-90 to 1993-94. The analysis would throw light on the development of

the region. The targets, achievements and proportionate share of different financial institutions were analysed for the above period.

The credit share of Malaprabha Grameena Bank has been presented in the Table 4.37. The table revealed that for the year 1989-90, out of the total plan outlay of Rs. 265.90 crores of the district, Malaprabha Grameena Bank was allotted with Rs. 28.29 crores representing 11 per cent. The performance under this plan has showed that the bank has recorded 124 per cent achievement compared to 74 per cent by commercial banks, 60 per cent by Co-operatives as against overall average of 70 per cent. The credit share of the bank in terms of achievement was 18 per cent.

During the year 1993-94, the share of the bank increased both in terms of the target (15%) as well as achievement (21%). The performance of the bank in terms of achievement of the target was highest (154 per cent) among the institutions.

Over the last five years, the share of the bank in the allotment of credit was 13 per cent where as the share in achievement was 18 percent. The percentage achievement of the target by the bank was 109 per cent as compared to 80 per cent by commercial banks and 67 per cent by cooperatives. The overall average percentage of achievement was 78 per cent.

Table :4.37 Credit Share of Malaprabha Grameena Bank

(Rs. in Crores)

Particulars	Commercial Banks	Malaprabha Grameena Bank	Co-operatives	Total
1989-90				
Target	113.11	28.29	124.59	265.99
	(43)	(11)	(46)	(100)
Achievement	83.77	35.22	74.57	193.56
	(43)	(18)	(39)	(100)
Percent Achievement	74	124	60	73
1990-91				
Target	121.16	24.39	103.04	248.59
	(49)	(10)	(41)	(100)
Achievement	59.74	14.56	34.4	108.7
	(54)	(15)	(31)	(100)
Percent Achievement	49	60	33	44
1991-92				
Target	98.62	32.95	85.22	216.79
	(45)	(15)	(40)	(100)
Achievement	64.37	23.44	38.01	125.82
	(51)	(19)	(30)	(100)
Percent Achievement	65	71	45	58
1992-93				
Target	96.52	28.82	91.66	217.00
	(44)	(13)	(43)	(100)
Achievement	91.52	32.52	90.57	214.61
	(43)	(15)	(42)	(100)
Percent Achievement	95	113	99	99
1993-94				
Target	121.01	41.29	110.39	272.69
	(44)	(15)	(41)	(100)
Achievement	140.44	63.59	104.99	309.02
	(45)	(21)	(34)	(100)
Percent Achievement	116	154	95	113
1989-94 (over all)				
Target	550.42	155.74	514.9	1221.06
	(45)	(13)	(42)	(100)
Achievement	439.84	169.33	342.54	951.71
	(46)	(18)	(36)	(100)
Percent Achievement	80	109	67	78

Note : Figures in the parantheses indicate the share of the institution in the total

4.2.2 Impact of Malaprabha Grameena Bank Finance on Borrowers

The impact of Malaprabha Grameena Bank finance on the beneficiaries has been analysed from the point of view of increase in income and employment by comparing the pre-loan and post-loan periods.

4.2.2.1 Impact on Income of Borrowers

The impact of bank finance on the income levels of different categories of borrowers has been presented in the Table 4.38. The table revealed that, the income levels of all categories of borrowers had increased after borrowing from the bank and making investments. The income levels of the beneficiaries in the irrigated area branches were higher compared to dry area branches, in the case of farmers who borrowed crop loan and agricultural labourers in one branch. Between the good performance and lower performance branches, the levels of income of beneficiaries belonging to good performance branches were found to be higher than lower performance branches in both irrigated and dry areas.

Among the different categories of beneficiaries, the income generation was found to be higher in the case of farmers followed by businessmen, artisans and agricultural labourers. The income generated under the farmers category was the highest in the case of Arekurahatti branch followed by Tirlapur, Nesaragi and Khanagaon. In the case of agricultural labourers,

Table 4.38 : Impact of Bank Finance on Income of Borrowers

(In Rupees)

Sl. No.	Name of the Branch	Farmers	Agricultural Labourers	Artisans	Businessmen
1	Nesargi				
	Before	35000	3500	6850	32500
	After	43200	6700	10500	43000
	Difference	8200	3200	3650	10500
		(23.42)	(91.00)	(53.28)	(32.31)
2	Khanagaon				
	Before	32300	3350	4150	22050
	After	38580	6300	7200	28850
	Difference	6280	2950	3050	6800
		(19.44)	(89.39)	(74.39)	(30.84)
3	Arekurahatti				
	Before	73500	3800	6200	35000
	After	99800	7140	9100	44700
	Difference	26300	3340	2900	9700
		(35.78)	(87.89)	(46.77)	(27.71)
4	Tirlapur				
	Before	74100	2900	4800	20500
	After	97700	5650	7600	26900
	Difference	23600	2750	2800	6400
		(31.85)	(94.83)	(58.33)	(31.22)

Note : Figure in the parantheses indicate percent change

the income levels generated was the highest in Arekurahatti followed by Nesaragi, Khanagaon and Tirlapur branch. When the artisans category was considered, the incremental income was found to be the highest in the case of Tirlapur branch and the lowest was in Arekurahatti branch. In the case of businessmen, the additional income generated due to borrowing was observed to be the highest in the case of Nesaragi branch followed by Arekurahatti, Khanagaon and Tirlapur in that order.

However interms of percentage increase in the income of borrowing categories, the percentage increase was more in the case of agricultural labourers followed by artisans, businessmen and farmers. The percentage change in income under the farmers category was between 35.78 per cent in Arekurahatti branch and 19.44 per cent in the Khanagaon branch. The percentage increase in the income levels was around 90 per cent across the branches. A maximum change of 74.39 per cent income was noticed under artisans category in Khanagaon branch. For the remaining branches it was around 50 per cent. As a result of bank finance, the income of businessmen was found to increase by 30 per cent.

4.2.2.2 Impact of Bank Finance on the Employment of Borrowers

Employment generation has got an important place as a social objective in our planning. The results of the impact of bank finance on the employment generation of the borrower

family has been depicted in the Table 4.39. The table revealed that the use of MGB credit has increased the employment in all the categories of beneficiaries. In irrigated area branches on an average the farmers were able to generate more employment followed by businessmen, agricultural labourers and artisans in that order. On the contrary, the businessmen have generated more employment in the dry area branches, followed by farmers, agricultural labourers and artisans.

A comparison of the employment generation between good performance and lower performance branches indicated that the extent of employment generation was higher in the good performance branches (Nesargi and Arekurahatti) compared to lower performance branches (Khanagaon and Tirlapur), for all categories of borrowers except in the case of artisans of Nesargi branch. In the case of irrigated area branches in relative terms, the employment generation was found to be highest in the case businessmen (58.98 per cent) and the least employment generation was observed under the category of artisans (37.84 per cent). Whereas in the case of dry area, branches, employment generation was the highest in the case of businessmen (65.52 per cent) and the least was observed in the case of farmers (22.98 per cent).

4.3 ASSESSMENT OF THE WORKING OF MALAPRABHA GRAMEENA BANK

The opinions sought from the policy makers, officials, and other bankers borrowers and were analysed separately and presented under the following headings.

Table 4.39 : Impact of Bank Finance on the Employment of Borrowers (Man days per Family)

Name of the Branch	Farmers	Agricultural Labourers	Artisans	Businessmen
1 Nesargi				
Before	1020	320	416	728
After	1316	483	607	1205
Difference	296	163	101	477
	(29.02)	(50.92)	(45.91)	(65.52)
2 Khanagaon				
Before	940	287	325	592
After	1156	416	458	884
Difference	216	129	133	292
	(22.98)	(44.95)	(40.92)	(49.32)
3 Arekurahatti				
Before	1635	395	385	685
After	2502	604	551	1089
Difference	867	209	166	404
	(53.03)	(52.91)	(43.12)	(58.98)
4 Tirlapur				
Before	1370	292	296	468
After	1970	435	408	659
Difference	600	143	112	191
	(43.80)	(48.97)	(37.84)	(40.81)

Note : Figures in the parantheses indicate percent change

4.3.1 The Working of the Malaprabha Grameena Bank in the Opinion of it's Policy Makers

To analyse the opinions of policy makers about the working of Malaprabha Grameena Bank, the technique of cluster analysis was used considering 20 variables. These variables grouped in to different characters based on similarity values as shown in the Table 4.40.

Out of the 20 variables, 13 variables were grouped under high aggregate cluster namely education and training, adequacy of staff, services provided to borrowers, impact of credit, branch supervision, communication within the bank, general problem, communication among banks, impact indicators, training to employees, coordination within the bank, financial problems and miscellaneous problems. The degree of similarity values of high aggregate cluster ranged from 93 to 100. There were five variables with similarity value of 100 at the top of the high aggregate cluster. At the bottom, the variables such as financial problems and miscellaneous problems were found with similarity value of 93.

The similarity values of medium aggregate cluster ranged between 87 to 92 and the variables were performance indicators at the top followed by bank management, cordination among banks and awareness to Government policies at the bottom.

Table 4.40. Aggregation of Clusters of Variables on the Performance of Malaprabha Grameena Bank According to it's Policy Makers

Aggregation of clusters	Variable code number	Name of the variable	Degree of Similarity
High	1,4,9,10,11	Education and experience* Adequacy of staff, services provided to farmers, Impact of credit, supervision*	100
	12,18	Comunication within Bank,* General problems.*	99
	14	Communication among Banks*	96
	17	Impact indicators*	95
	6,13	Training* co-ordination within the Bank*	94
	19,20	Financial problems*, Miscellaneous problems*	93
Medium	16	Perofrmance indicators*	92
	2,8,15	Bank Management* Coordination among Banks Awareness to Government policies	87
Low	3	Decision at the head office	67
	5	Education levels of the employees	66
	7	Effectiveness of training	61

* Common variables for both policy makers and officials

In the low aggregate cluster, the similarity values ranged from 61 to 67 with the variables decision at the head office (67) at the top followed by education levels of the employees (66) and effectiveness of training (61) at the bottom.

4.3.2 The Working of the Malaprabha Grameena Bank in the Opinions of it's Officials

The opinions of the officials expressed on the working of Malaprabha Grameena Bank were analysed with the help of cluster analysis technique and the results are presented in the Table 4.41.

Out of 16 variables, seven variables were found in high aggregate cluster, another four variables were grouped in medium aggregate cluster and the remaining five were included in the low aggregate cluster.

The similarity values of high aggregate cluster ranged from 46 to 54 with the variables namely, managerial capacities at the top (54) followed by leading and supervision of subordinates, harmony among officials, impact indicators, financial problems, miscellaneous problems and involvement (46) at the bottom.

Four variables were found in medium aggregate cluster namely, bank management, general problems, training and

Table 4.41. Aggregation of Clusters of Variables on the Performance of Malaprabha Grameena Bank according to its Officials

Aggregation of clusters	Variable code number	Name of the variable	Degree of Similarity
High	4, 5	Managerial capacities, supervision*	54
	7	Coordination within the Bank*	53
	13	Impact indicators*	49
	15,16	Financial problems*, Miscellaneous problems*	47
	3	Involvement	46
Medium	11,14	Bank Management*, General problems*	45
	2,8	Training*, communication within bank*	43
Low	1	Education and experience*	37
	10,12	Functioning of the Board, performance indicators*.	35
	6	Execution of plans and policies	31
	9	Communication among banks*	28

* Common variables for both policy makers and officials

communication within the bank. The similarity values were ranged between 43 to 45.

In the low aggregate cluster, similarity values ranged from 28 to 37 with the variables viz., education and experience, functioning of the board, performance indicators, execution of plans and policies and communication among banks.

4.3.3 The Working of the Malaprabha Grameena Bank in the Opinion of Other Bankers

The opinions of other bankers operating in both Belgaum and Dharwad districts were collected, analysed and interpreted. The opinions were related to performance of the MGB and it's policy matters discussed as under.

4.3.3.1 Opinion of other Bankers on the Performance of Malaprabha Grameena Bank

The opinions of other bankers about the performance of Malaprabha Grameena Bank were presented in the Table 4.42. It could be seen from the table, that majority of the respondents expressed good performance of Malaprabha Grameena Bank in the area of Deposit mobilisation (58%), Participation of the bank in Government sponsored programmes (75%) and participation of the bank is district credit plan and the achievements. Satisfactory opinion was expressed by the respondents relating to the indicators, branch expansion (67%), Advances to

Table 4.42. Opinion of other Bankers on the Performance of Malaprabha Grameena Bank

(in percent)

Sl. No.	Particulars	Good	Satis-factory	Poor
1.	Branch expansion	33	67	-
2.	Deposit mobilisation	58	42	-
3.	Advances to different beneficiaries	33	50	17
4.	Participation in Government sponsored programmes	75	17	8
5.	Customer services	42	58	-
6.	Participation in district credit plan and the achievements	92	8	-
7.	Profitability	33	50	17

different beneficiaries (50%), customer service (58%) and profitability (50%).

On the contrary, a poor performance was expressed by the respondents relating to advances to different beneficiaries (17%), participation of the bank in Government sponsored programmes (8%) and profitability of the bank (17%).

4.3.3.2 Opinion of other Bankers on the Policy Matters of Malaprabha Grameena Bank

The opinions expressed by other bankers about the policy matters relating to Malaprabha Grameena Bank have been depicted in the Table 4.43. The table revealed that about 42 per cent of the respondents were in favour of separating Malaprabha Grameena Bank from the sponsor bank. Whereas, 25 per cent of the respondents were against this proposed policy change. Another 33 percent of the respondents did not offered their remarks on this aspect.

Regarding the increased lending to non-target groups and it's likely impact on target groups, about 50 per cent of the respondents opined that it is going to affect the target groups. In contrast to this, remaining 50 per cent of the respondents expressed that this may not come in the way of target groups. In respect of opening of NRI accounts and taking of export financing, about 50 per cent of the respondents favoured this policy, where as 42 per cent of the

Table 4.43. Opinion of other Bankers on the Policy Matters of Malaprabha Grameena Bank

(in percent)

Sl. No.	Policy indicators	Yes	No	No Remakrs
1.	Whether MGB should be separated from sponsor bank	42	25	33
2.	Whether lending to non-target group affects the interest of target groups	50	50	-
3.	Whether MGB can be allowed to open NRI accounts and takeup export financing	50	42	8
4.	Whether non-funded business of MGB should be increased	58	25	17
5.	Whether MGB can float shares/ debentures to public	33	59	8

respondents opposed and another eight per cent of the respondents did not offer any comment.

In the case of increase in non-funded business of the bank, about 58 per cent of the respondents agreed for this issue, where as 25 per cent of the respondents disagreed and remaining 17 per cent respondents remained neutral. The policy in respect of floating of shares or debentures to widen the capital base, was supported by 33 per cent of the respondents, but about 59 per cent of the respondents did not support this view. A small proportion of the remaining respondents remained neutral on this issue.

4.3.4 Opinions of Borrowers

The performance of Malaprabha Grameena Bank has been discussed at length in the earlier chapters which present an overall view about it's working in terms of selected indicators and also from the view point of Directors, Officials and other bankers. Added to this, a better insight into it's working can be obtained by studying the reactions of it's beneficiaries. The opinions of the borrowers about the bank have been presented in the Table 4.44.

The table revealed that on an average about 35.63 per cent of the respondents opined that the procedure in obtaining the loan was cumbersome. The proportion of beneficiaries faced this difficulty was found to be higher in the case of artisans

Table 4.44 : Opinions of Borrowers about Malaprabha Grameena Bank

(In percent)

Sl. No.	Category/Opinion	Farmers (N=40)	Agricultural Labourers (N=40)	Artisans (N=40)	Businessmen (N=40)	All Category (N=160)
1	Combersome loan procedure	27.50	35.00	47.50	32.50	35.63
2	Inadequate loan amount	72.50	90.00	87.50	77.50	81.88
3	Technical guidence	15.00	15.00	12.50	7.50	12.50
4	Loan supervision	20.00	40.00	52.50	45.00	39.38
5	Safisfactory customer service	75.00	72.50	77.50	80.00	76.25
	REASONS FOR BORROWING FROM MGB					
1	Neglect by others	62.50	75.00	67.50	65.00	67.50
2	Exploitation by money lenders	57.50	82.50	72.50	60.00	68.13
3	Timely availability of loan	75.00	75.00	50.00	75.00	68.75
4	Cheap cost of credit	75.00	82.50	67.50	82.50	76.88
5	Location advantage	92.50	87.50	80.00	85.00	86.25

(47.50%), followed by agricultural labourers (35%) businessmen (32.50%) and the least was in the case of farmers (27.50%). It was disheartening to note that about 81.88 per cent of the respondents felt that the amount of loan sanctioned was inadequate. The level of inadequacy of the loan amount was higher in the case of agricultural labourers (90.00%), followed by artisans (87.5%), businessmen (77.5%) and the least in the case of farmers (72.5%).

With regard to the provision of technical guidance by the bank, it was opined by about 12.50 per cent of the beneficiaries that they were provided with technical guidance. The extent of technical guidance availed was found to be higher in the case of farmers and agricultural labourers compared to other two categories of beneficiaries. Nearly 40 per cent of the respondents expressed that the bank staff supervised the utilisation of loan. The supervision was observed to be more in the case of agricultural labourers, followed by artisans and businessmen. The least importance was given for supervision of loans of farmers. Majority of the respondents (72-80%) expressed that the service extended by the bank was satisfactory. The proportion of the respondents satisfied with the services was higher in the case of businessmen and lower in the case of agricultural labourers.

When the respondents were asked to express their opinion about the reasons for borrowing from Malaprabha Grameena Bank,

about 60-75 per cent of the respondents preferred to borrow from MGB because of the neglect by other institutions in providing credit. The extent of this problem was higher in the case of agricultural labourers, artisans, businessmen and farmers in that order. On an average about 57-82.5 per cent of the respondents expressed their preference to borrow from MGB due to the exploitation by money lenders. Further, it was expressed that the degree of exploitation was higher in the case of agricultural labourers followed by artisans, businessmen and farmers.

Nearly 68 per cent of the respondents on an average expressed that they preferred MGB compared to other institutions for borrowing due to the timely availability of credit. A higher proportion of respondents with this opinion was found in the category of agricultural labourers, businessmen and farmers. About 50 per cent of the respondents in the category of artisans expressed inordinate delay in the provision of credit. More than three-fourth of the respondents expressed that the cost of credit was cheap which prompted them to borrow from MGB. Similarly, more than 80 per cent of the respondents preferred to borrow from MGB due to the locational advantage. Since the bank branch has been functioning at the village level, majority of the respondents preferred this branch due to easy accessibility.

CHAPTER - V

DISCUSSION

V. DISCUSSION

The results of the investigation presented in the previous chapter are discussed in the present chapter. The main focus here is to throw light on some of the causes responsible for the major trends observed and indicated in the last chapter. The analysis of the main trends in terms of their causes and also in terms of their inter connections, it is hoped, would help in identifying some of the policy measures which could be adopted to overcome the constraints in the performance of the bank in general and beneficiaries in particular.

The discussion is presented under the following heads.

5.1 Performance of the Malaprabha Grameena Bank
5.1.1 Performance Indicators of Malaprabha Grameena Bank
5.1.2 Analysis of the Bank's performance through financial ratios.
5.1.3 Growth pattern of Malaprabha Grameena Bank
5.1.4 Pattern of credit flow and deposit mobilisation
5.1.5 Measurement of branch performance
5.1.6 Capital adequacy level of the bank
5.1.7 Break-even volume of business
5.1.8 Relative performance of the bank
5.1.9 Overdues of the bank
5.1.10 Association between managerial efforts and business performance
5.2 Impact of Malaprabha Grameena Bank
5.2.1 Credit share of Malaprabha Grameena Bank
5.2.2 Impact of Malaprabha Grameena Bank on beneficiaries
5.3 Assessment of the working of Malaprabha Grameena Bank
5.3.1 Opinions of policy makers of the bank
5.3.2 Opinions of officials of the bank
5.3.3 Opinions of other bankers
5.3.4 Opinions of beneficiaries of the bank

5.1 Performance of the Malaprabha Grameena Bank

5.1.1 Performance Indicators of the Malaprabha Grameena Bank

The study of past growth and development of fundamental things relating to an organisation is quite essential for performance evaluation. Like any other institution, Malaprabha Grameena Bank is also having physical and financial variables influencing the performance of the bank and are discussed as under.

5.1.1 Physical Indicators of Malaprabha Grameena Bank

The effective functioning of any institution will definitely be influenced by the attitude of the staff who man the institute. The right attitude of the staff would certainly boost it's image and this is particularly valid in the case of Malaprabha Grameena Bank. The staff would play an important role in effecting proper coordination among different functionaries as well as in discharging the legitimate duties assigned to them besides managing and supporting the policy wing of the bank. This will ultimately result in extending the benefit of rural banking to the poorest section of the rural population. The details are furnished in the Table 4.1, Fig 4 to 6 and Appendix I.

Branches were necessary to provide banking facilities to the people at proper places and at the right time. One of the important indicators of highlighting the bank's role was the

extent of the branch network. Malaprabha Grameena Bank implemented the branch expansion programme systematically covering the nook and corner of the operational area. Thus the average number of branches increased from 52 in the establishment period to 186 in the development period with an overall average of 149 branches, as the staff position improved. Number of branches from 1987 remained constant upto 1994, due to the branch licensing policy of the Reserve Bank of India which has not sanctioned fresh licences for branch expansion. The bank made entry into the remote rural areas in consonance with the fundamental objective of RRB's to expand their network to interior areas of the country. As on 1994, out of 208 branches, 192 branches (92%) were opened in rural area, another nine branches in semi-urban areas to link the activities of the rural branches and seven branches in urban areas. It was crystal clear from the above discussion that the bank has committed itself for the development of rural area by opening the branches to provide credit facilities linked with transfer of technology.

The number of families covered per village, villages covered, advance accounts, employee per branch and the number of advance accounts per branch were directly related to the number of branches and manpower. So they also showed the similar trend. However, the villages covered after 1989, declined due to the introduction of the service area approach,

in which the banks were allotted with specific number of villages and can not encroach in the areas allotted to other banks by way of branch expansion.

An increase in staff position from 26 in 1976 to 1499 in 1994, was inevitable due to the bank's massive branch expansion programme. More number of staff members were seen in the period of development compared to the establishment period because appointments were made to look after the increased number of branches along with increased work load. The number of staff members increased over the years from 1976 to 1989, but interestingly the staff position declined from 1989 to 1993. This can be attributed to the fact that some staff members got better placements in other organisations left the Malaprabha Grameena Bank. The number of employees per branch however varied between five to six in the establishment, development and overall periods. This clearly indicated that the staff position in each branch was maintained as per the norms of the Banking Commission depending upon the workload in each branch.

The bank has built up a special image and distinct landmark in deposit mobilisation. The deposit accounts had increased from just 200 in 1976 to 1.72 lakhs in 1980, the end of establishment period with an average of 0.748 lakhs accounts. During the development period, the deposit accounts increased from 2.43 lakhs in 1981 to 8.90 lakhs in 1992, but

interestingly declined in the next two years. The growth in deposit accounts was mainly due to the dedicated efforts of the bank staff, launching of deposit compaigns, motivation provided to the staff members by way of competitions and awards and launching of attractive deposit schemes. However, the deposit accounts during the last two years were found to be declining. The possible reason could be the maturity of more number of deposit accounts or the bank. The deposit accounts per branch also exhibited the similar trend as that of the deposit accounts of the bank. The advance accounts increase over the years due to massive credit deployment. Similarly the advance accounts per branch also exhibited an increasing trend over the years due to the greater increase in advances of the bank compare to a lower increase in the number of branches. The deposit accounts per employee increased throughout the establishment period but fluctuations were seen in the development period. The deposit accounts per employee declined in the years 1983, 1986 to 1989, from the respective preceding years due to the increase in number of employees. This had reduced the number of deposit accounts per employee. The decline in deposit accounts per employee in the year 1993 and 1994 were mainly due to the decline in total number of deposit accounts of the bank in these years. The advance accounts per employee did not showed any specific trend and fluctuated too much from year to year due to the variations in both advance accounts and number of employees.

5.1.2 Financial Indicators of Malaprabha Grameena Bank

The performance of financial indicators are presented in the Table 4.2, Fig 7 to 10 and Appendix II. The success or failure of the credit institution especially like the Regional Rural Banks could be adjudged by the extent of credit deployment to the target groups. The Malaprabha Grameena Bank did make laudable progress in this direction. The total advances of the bank had increased from just Rs. 87,000 in 1976 to Rs. 15,271 lakhs in the year 1994 with an overall average of Rs. 5315 lakhs. The total advances increased continuously over the years, except in 1991 where in the bank advances declined from the preceding year. This was partly due to the massive efforts made by the bank in credit deployment in the previous year and adoption of Agricultural and Rural Debt Relief Scheme in the present year.

In the area of deposit mobilisation, the bank had made a remarkable progress as evident from the figures that the deposits of the bank had increased from Rs. 1.36 lakhs in 1976 to Rs. 14,554 lakhs in 1994, with an overall average of Rs. 4090 lakhs. The total deposits increased continuously both in the establishment and development periods. The bank was able to witness the landmark of crossing one hundred crores of deposits from the year 1993 onwards. This achievement was possible on account of the dedicated work of all the staff members and the dynamic role of the chairman who inspired the

staff members in resource mobilisation. Deposit compaigns, prizes to managers and branches, etc., facilitated the above growth. The bank staff strived to reach large number of households in the service area villages. New savings schemes were floated to inculcate the savings habit among the ruralites, besides expansion of branches to cover larger area and more number of house holds.

The total business of Malaprabha Grameena Bank had increased from Rs. 2.23 lakhs in 1976 to Rs. 29826 lakhs in 1994 and business per branch increased from Rs. 1.11 lakhs to Rs. 143 lakhs during same period which was mainly due to increase in branch expansion, mobilisation of more deposits and higher deployment of credit. This was supported by assured irrigation facilities, infrastructure, new technology and credit discipline among the people.

In order to know the financial situation of the bank, the income, expenditure and profit or loss were analysed. The income and expenditure of the bank were exhibited continuously increasing trend over the years and the profitability was most unstable. The increase in income of the bank was mainly due to increase in interest income. The expenditure of the bank constituted of interest expenses, man-power expenses and other expenses. Inspite of increase in volume of business, the profitability position has not improved tremendously due to narrow spread and increase in manpower expenses. Efforts can

be made to reduce the interest expenses by effectively resorting to various sources of finance which carry a lower rate of interest, especially the current deposits. Hence, it can be reiterated that canvassing may be launched on a vigorous scale to mobilise current deposits in order to minimise interest costs. The bank could improve it's profit margin by proper management of cash and investment portfolios.

The recovery performance of the bank did not show any consistent trend. The percentage of recovery to demand was higher in the establishment period, but declined in the development period. This had not only affected the recyclining of funds but also exerted adverse impact on profitability and financial discipline. The exogenous and endogenous factors were responsible for lower recoveries. In order to improve the recovery position, the bank had adopted several measures like special recovery squad, special recovery drives, task force at branch level and convincing and educating the defaulters to repay the loan.

Bank has been availing refinance facility mainly from National Bank for Agriculture and Rural Development followed by Sponsor bank and State Industrial Development Bank of India. The various types of refinance drawn were managed meticulously and systematically on the lines of NABARD guidelines. The refinance availed had increased continuously throughout the establishment period, but fluctuations were seen in the

development period. However, it had touched a higher level of outstanding refinance of Rs. 7950 lakhs in 1994 from Rs. 25 lakhs in 1977. Malaprabha Grameena Bank has been in the forefront in drawing maximum refinance under schematic lending and earned the appreciation of NABARD for the prompt repayment of interest as well as principal amount against the scheduled demand.

The bank has actively participated in various Government sponsored programmes, like IRDP, 20 point economic programmes, Bio-gas, Anthyodaya, Special component, which were appreciated by the District Administration. The amount sanctioned was the highest in the year 1983 due to in-adequate participation of District Central Co-operative Bank of Dharwad district which compelled the Malaprabha Grameena Bank to take a lion's share in Government sponsored programmes.

The paid up share capital of the bank has remained constant at Rs. 25 lakhs since inception upto 1989. In the year 1990, the Government enhanced the capital contribution of Rs. 50 lakhs and once again in 1993 the capital was further enhanced to Rs. 75 lakhs comprising of Rs. 37.50 lakhs of Central Government, Rs. 26.25 lakhs of sponsored bank and Rs. 11.25 lakhs of state Government. The enhancement of capital was made mainly with the objective of providing more capital base to Malaprabha Grameena Bank to attain viability in its operation.

The non-performing assets of the bank were increased from Rs. 247.11 lakhs in 1987 to Rs. 2179.15 lakhs in the year 1994. These were observed only during the development period and the bank has been making all out efforts to minimise the incidence of non-performing assets since these assets do not earn any income.

Increasing the level of local employment of deposits mobilised locally is a marked feature of RRBs and an analysis of credit-deposit ratios attained by the Malaprabha Grameena Bank would be an important indicator of their contribution to the development of the concerned region. The credit-deposit ratio has been more than 100 per cent in the development period, where as it was less than 100 per cent in the years 1976 and 1979. The C-D. ratio fluctuated in the establishment period and part of development period upto 1986. But after 1987 it started declining and once again increased in 1993 and declined in the year 1994 and was around 104 per cent.

The credit-deposit ratio of more than 100 per cent indicates that the bank was advancing more than the deposits mobilised, which was not sustainable for an institution in the longrun. The bank has to depend more and more on borrowings i.e., call money market at a higher rate of interest that may affect adversely the profitability of the bank under increasing non performing assets and low recovery. Thus the reduction in credit-deposit ratio was inevitable and desirable.

The bank can borrow the funds from RBI, Sponsor bank, NABARD and SIDBI. The borrowings of the bank has shown continuously an increasing trend except in the years 1991 and 1992 in which the borrowings declined from the respective previous years. The possible reason that could be attributed was, the bank did not borrow any funds from Reserve Bank of India.

The advance per branch increased from Rs. 3.18 lakhs in the establishment period to Rs. 36.66 lakhs in the development period. The overall increase was to the extent of Rs. 27.36 lakhs. This increase was mainly attributed to the massive credit deployment programmes launched by the bank. In the recent years, the advances of the bank has increased, keeping constant the branches, which has also lead to increased advances per branch. The deposits per branch also exhibited the similar trend and was attributed to the concerted efforts of bank staff in mobilisation of deposits as well as introduction of new deposit schemes by the bank. The business per branch also followed the same trend as that of advances and deposits and the reasons were the factors responsible for increase in both advances and deposits, since the business is nothing but addition of advances and deposits.

The advances per employee indicated an increasing trend over the years, except in 1983 and 1991. The lower advances in 1983 was mainly due to the higher number of

employees compared to advances, thus reduced the advances per employee. During the year 1991, the total advances of the bank itself was lower than the preceding year which has resulted in the decline of advances. The deposits per employee also increased over the years. The deposit per employee increased from Rs. 5231 in 1976 to Rs. 9.70 lakhs in 1994 with an overall average of Rs. 3.24 lakhs. In the years 1981 and 1986, the deposits per employee were found to be less than the respective previous years and the possible reasons could be the rate of increase in manpower was more than the rate of increase in deposits, thus reducing the deposits per employee. Another possible reason was that the bank managed to step up deposit amount but not with the same degree as in the previous year and the bank staff might have paid more attention towards deployment of credit than the deposit mobilisation drive.

5.1.2 Analysis of the Bank's Performance through Financial Ratios

Financial ratios explain in detail the ultimate financial position of the bank. For this purpose, some relevant ratios were worked out and presented in the Table 4.3 discussed as under.

5.1.2.1 Liquidity Ratios

Liquidity ratios were worked out to study the financial soundness of the bank. The concept of liquidity has

more relevance for a financial institution, which indicates the ability of the bank to cover its short term obligations out of it's own shortterm resources.

(a) Current Ratio

The current ratio has been regarded as an important barometer of the liquidity position of the institution. It indicates the ability of an institution to meet its short term commitments as and when they fall due. If this ratio happens to be greater than one it could be presumed that the institution had sufficient current assets to meet it's current obligations. Generally a current ratio of two has been considered ideal as per Foulke (1974) and Natarajan (1980).

It could be seen from the Table 4.3 and Appendix III, that the current ratio of the bank was more than two. From the year wise data, it was observed that it ranged between 4.696 to 1.227 during the study period. The value of the ratio from 1976 to 1990 was found to be more than two, but from 1991 to 1994 the ratio was found to be less than two which was mainly due to increase in current liabilities as a result of borrowings. The value above unity indicates a firm's ability to meet current obligations. However, the overall value of the ratio in all the periods was more than two, thus it could be concluded that bank had maintained sufficient current assets to meet current obligations and has sound liquidity position.

(b) Credit-deposit Ratio

The credit-deposit ratio of the bank indicated the creation of credit out of the deposits mobilised. It could be seen from the Table 4.3 and Appendix III, that the credit-deposit ratio was more than 100 per cent in all the periods. A lower ratio in the year 1976 and 1979 was due to lower advances compared to deposits mobilised by the bank. In other years it was observed that the ratio was more than 100 per cent. From the beginning of development period upto 1984 and between 1986 to 1990, the credit-deposit ratio has been more than 150 per cent. However, this ratio tended to decline from 1991 onwards, because of matching growth in both deposits and advances. Sangwan (1989) observed that the lowest credit deposit ratio was associated with the largest profit making RRB of Uttar Pradesh and even of India. The lower C-D ratio (104.926 per cent) towards the end of development period substantiated the observation that more advances were not positively associated with profits, since the bank had earned a profit of Rs. 20.5 lakh even after covering accumulated loss of Rs. 324.56 lakhs.

(c) Liquid Assets to Total Assets Ratio

It could be seen from the Table 4.3 and Appendix III, that the ratio has been less than unity in all the periods. As seen from the raw data, a higher ratio was observed from 1976 to 1985, but from the year 1986 upto 1994, the ratio tended to

be lower and lower. This was mainly due to the consideration of the bank for current working funds in the beginning of establishment period. As the bank developed, the investment in fixed assets and fixtures increased on one hand and the cash reserve to be maintained was lower due to the concessions extended to this bank as a RRB, thus reduced the ratio. Sukumaran and Shaheena (1991) observed that the Co-operative Bank had maintained a higher level of liquid assets in the form of cash reserves above the norms prescribed by the Reserve Bank of India which has affected adversely it's profitability, since these funds were not deployed and the rate of interest they earn has been far below than the lending rates. Thus it can be concluded that the Malaprabha Grameena Bank has been efficiently managing the liquid assets.

(d) Acid-test Ratio

This ratio has been regarded as a refined measure of liquidity and assesses how liquid the bank would be if the business operations come to an abrupt halt. The ratio was observed to be less than unity in all periods (Table 4.3 and Appendix III). An analysis of yearwise data indicated that the ratio was more than unity in 1976 and 1979 in the establishment period. In the development period, the ratio was more than unity in the years 1981, 1984 and 1985. From 1986 onwards the ratio was less than unity due to increase in the current liabilities, like interest accrued, bills payable and other

provisions. On the other hand as already discussed, the bank has not maintained large proportion of current assets in which the liquid assets were part of it was also responsible for this lower ratio especially in the latter years of the development period.

5.1.2.2 Solvency Ratios

In order to findout the extent of contribution of the bank towards the funds provided by it's creditors, the solvency ratios were worked out and were presented in the Table 4.4 and discussed below.

(a) Debt-equity Ratio

This ratio indicated the bank's stake in the business with outside term liabilities. Higher the ratio, lower the stake and vice-varsa. It was observed from the Table 4.4 and Appendix III that in the establishment period the bank was operating on a thick margin of equity as the ratio was lower. In contrast to this, as the bank started expansion and took up development activities, the owned capital was found insufficient and the bank started borrowing more funds and also refinance facility from NABARD. As a consequence, the ratio goes on increasing and even touched as high level of 63.941 per cent in the year 1994. This indicated that the bank was operating on a thin equity in which borrowed capital played a dominant role. Thus the bank was following the pattern of high capital gearing in financing its assets.

(b) Indebtedness Ratio

The indebtedness ratio indicates the extent of debt per rupee of owned funds. It indicated the extent of reliance on outside capital by the bank. The prescribed norm has been 3:1, which indicates, three times external funds could be used in relation to owned funds. From the yearwise data, it was observed that the ratio in the establishment period was ranging from 3.882 to 6.429 which was higher than the prescribed norm. In the development period, the bank was able to stabilise this ratio around three but less than four between the years 1981 to 1991 (Table 4.4 and Appendix III). This was mainly due to more or less equal growth in both owned funds and total liability of the bank. Afterwards the ratio started increasing and even crossed four per cent due to the increase in liability at a faster rate than the networth because of increase in share capital of the bank from Rs. 50 lakhs to 75 lakhs and increased borrowings from 5805.743 lakhs to Rs. 7996.91 lakhs as well as refinance facility of NABARD. The ratio above three which was observed towards the end of development period does not mean the poor solvency position of the bank, because borrowing from sponsor bank or NABARD or RBI becomes inevitable in order to meet the credit requirements of the rural borrowers.

5.1.2.3 Tests of Strength

The net worth and net capital ratios indicate the longrun liquidity position of the business or real worth of the institution.

(a) Net worth

This indicated the difference between assets and liabilities of the bank. A positive and higher magnitude networth indicates a favourable situation for the bank. It could be seen from the Table 4.5 the net worth in the establishment period was found to be negative due to excess liabilities compared to assets. In the beginning more and more funds were borrowed in order to expand business, cover more area and large number of beneficiaries even though the share capital and reserves available were less with the bank. Moreover, the bank was not earning profit in the establishment period. When yearwise data was considered, in the development period, the net worth was positive in majority of the years except in 1982 to 1984 (Appendix IV). This was mainly due to increased liabilities over assets because of increased deposits and and borrowings of the bank. Subsequently when bank created more and more assets, both current assets, fixed assets and advances, besides reserves out of the net profits, the net worth of the bank was found to be positive and of higher magnitude to touching a highest level of Rs. 722.59 lakhs in 1994. The networth was found to be positive both in the development (Rs.268.516 lakhs) and overall periods (Rs.188.053 lakhs).

(b) Net capital Ratio

The net capital ratio indicated the degree of liquidity of the bank in the longrun. The value was less than unity in the establishment and overall periods. The ratio was less than unity throughout the establishment period as against more than unity throughout the development period when the raw data was seen. The ratio of more than unity for the bank indicated that the assets of the bank were sufficient enough to cover the total liabilities. By the year end 1994, the bank has assets worth of Rs. 1.031 for each rupee of liability which indicated a good strength of the bank (Appendix IV).

5.1.2.4 Profitability Ratios

Profitability ratios can be used to assess the financial health of the institution (Table 4.6). At the time of establishment of RRBs during 1975, it was presumed that these banks would provide credit service to weaker sections of the society relegating profitability aspect to the second place. Few researchers in the past has argued that performance of Regional Rural Banks need not be assessed interms of profitability since, they were established with the moto of service. However, for any financial institution in order to sustain in the long run, an element of profit becomes inevitable. In view of the recent policy implications, this aspect has been recognised as an important yardstick for

continuation of the established institution on a sound footing to render efficient services for a longer period. Many Regional Rural Banks in the Country were not able earn a reasonable amount of profit and as a result their viability has been questioned by Khusro and Narasimhan in their reports. Narasimhan recommended for merger of these RRBs with their sponsor banks, where as Khusro has gone to the extent of stating that these RRBs not find a place in the financial system of our country. Keeping in view these aspects, it was considered appropriate to analyse the profitability position of Malaprabha Grameena Bank considering the following ratios.

(a) Net Profit to Total Assets Ratio

The ratio of net profit to total assets was negative in the establishment period and overall period. It was interesting to note that the ratio was almost equal to zero in the development period (Table 4.6). A look at the yearwise data indicated that except for the first year, the ratio was found to be negative in all the years of establishment period, since the bank has incurred losses in all these years due to higher expenditure compared to income. Even in the years 1992 and 1993, the ratio was negative because of the losses (Appendix IV). In the development period the bank was able to earn some profit, but the magnitude was very low and this has resulted in to a lower ratio. Mohsin (1977) suggested that this ratio should be above two percent for efficient utilisation of

assets. But the bank had never reached this ratio in any of the years due to its lower level of profitability in relation to assets. Thus there is a need to put in lot more efforts to increase profit by reducing the cost and increasing the income so as to achieve atleast standard norm of two percent.

(b) Net Profit to Net Worth

This ratio shows the rate of return on equity capital of the bank. It was observed from the yearwise data that the ratio was found to be negative in all the years of establishment period, because the net worth itself was negative for the bank in all these years. Since the profit as well as the networth were negative in the establishment period the ratio was not calculated. In the development period the ratio was found to be negative for the years 1982 to 1984, since the networth was negative for these years as a result of lower level of assets compared to liabilities. Once again in the years 1992 and 1993 the ratio was found to be negative due to the losses incurred by the bank because of higher level expenses over the income earned by the bank. The ratio was observed to be the highest in the years 1986 and 1987 due to the lower volume of networth in relation to profitability. How ever, the ratio in the recent years was found to be very low as well as negative in development period and it was a cause for inquiry.

(c) Net Profit to Fixed Assets

This ratio indicated the extent of proper use of fixed assets (Table 4.6). The ratio was found to be positive in the first year of the establishment period and was 16.2 percent as revealed by the raw data (Appendix IV). But in the remaining years the ratio was observed to be negative, because the bank has incurred losses, in all these years. Similarly negative ratio was seen in the years 1992 and 1993 and was mainly due to the losses incurred in these years. This ratio ranged between as high as 94.7 percent to as low as 1.8 percent in the years 1982 and 1989. The reason was a higher level of profit in the former year and a lowest level of profit in the latter during the establishment period. In the year 1994, the ratio was observed to be 7.1 percent. The possible reasons that could be attributed for this lower ratio were, firstly the profit earned by the bank was meagre in relation to fixed assets and secondly by the depreciation on fixed assets worth of Rs. 54.58 lakhs was not written off which has inflated the value of fixed assets.

5.1.2.5 Efficiency Ratios

The following efficiency ratios were computed to know the extent of utilisation of gross income of the bank and are depicted in the Table 4.7.

(a) Gross Ratio

This ratio campares the total expenses of the bank to it's gross income earned during the year. In otherwords this ratio measured the expenses for every Rs. 100 income of the bank. It was evident from the Table 4.7 that the ratio was more than 100 per cent in the establishment and overall periods. The yearwise data indicated that the ratio was more than 100 per cent in the last four years of establishment period as well as during the years 1992 and 1993 in the development period (Appendix IV). This was mainly due to higher level of expenses over the gross income of the bank. The ratio was observed to be less than 100 per cent but more than 90 per cent in the remaining years of development period and was 83.333 per cent in the first year of establishment period. The growth rate analysis also revealed that growth in income was less than expenditure in the establishment period and this has clearly indicated a lower margin of profit to the bank, since the major proportion of income was being utilised to meet the expenses of the bank. From the view point of service, the higher proportion of expenses in the gross income was acceptable, but from the point of view of sustainability, perhaps necessitated a higher margin of profit by reducing the total expenses of the bank on one hand and increasing the gross income of the bank on the other.

(b) Operating Ratio

This ratio indicated the operating efficiency and was important to management in judging its operations and the results are presented in the Table 4.7. It was presumed that there exists an inverse relationship between the value of the ratio and efficiency of the operation. The results of the yearwise data analysis revealed that the ratio was more than 100 per cent in the year 1977, (Appendix IV) and the average for the establishment period was more than 60 per cent, which was obvious in view of the fact that the bank in the initial stages concentrated on expansion of branches to cover more and more area and clientele. Hence, the operating expenses were found to be higher.

The ratio was found to be lower than 50 per cent in all the years of development period except in the years 1992 and 1993. This was mainly due to increase in establishment expenses as a result of revision of pay scales of bank staff on par with other banks. However, the average ratio has been restricted around 43 per cent in the development period as well as overall period that spoke about higher operating efficiency of the bank in transacting the business.

5.1.2.6 Spread, Burden and Profit Analysis of Malaprabha Grameena Bank

The main objective of Malaprabha Grameena Bank was to work for the social, ethical and economic upliftment of it's members and earning profit has been regarded as subsidiary aspect. But at the same time, viability aspect has to be taken care which inturn was determined by profitability. During the recent years, the profit earning capacity of the bank has come under severe strain and it has become imperative for us to bestow greater attention to this vital area. The spread, burden and profitability ratios of the bank were analysed and discussed as under.

(a) Spread, Burden and Profit of Malaprabha Grameena Bank

As seen earlier, (Table 4.8) and the glance at raw data, income from loans advanced constituted the major source of revenue for the bank followed by non-interest income. On the other hand, interest on deposits, borrowings, manpower expenses and other expenses constituted the expenditure of the bank. The bank has incurred losses throughout the establishment period except in the first year. This was mainly due to increase in burden ratio as compared to spread ratio. The manpower expenses and other expenses also increased due to the increased number of branches and appointment of new personnel to handle the affairs of the developing institution

in the initial period which was inevitable. In the development period, though the bank has earned profits, but a declining trend was seen in some years and this was attributed to the higher rate of growth in burden compared to spread of the bank. It was also seen that the profit of the bank declined whenever the burden of the bank has increased. The increase in the burden was mainly due to the increase in manpower expenses, other expenses and decline in other incomes and the total spread.

The bank has incurred losses in the years 1992 and 1993 due to higher burden compared to spread (Appendix V). The spread has declined in the year 1992 compared to previous year, due to the decline in interest earned on advances, increase in interest paid on deposits and borrowings. The bank has sacrificed the interest on advances which were written off due to the Government policy through the Agricultural and Rural Development Relief Scheme of 1990. The bank forgone the interest on these advances on one hand and on the other hand it did not receive the amount from the Government early, which had promised to make good of this interest portion.

The burden has increased in 1992 from the previous year due to increased manpower expenses coupled with increased non interest expenses. The reason was the award of higher pay scales to Malaprabha Grameena Bank employees on par with other commercial banks. In the year 1993, the spread has no doubt

increased from the previous year, but the burden has increased at a faster rate and offset the increased spread which resulted into losses to the bank. The reasons explained above holds good for this year also.

The bank has earned the highest level of profit in the year 1991 due to a higher spread compared to burden. Inspite of increase in interest expenditure a higher level of spread was obtained due to increase in interest income earned on advances. The burden of the bank also increased in the year 1993 compared to previous year, but at a lower rate. This was mainly due to decline in other expenses of the bank coupled with increase in non-interest income.

During the year 1994, the bank has been able to earn a profit of Rs. 20.50 lakhs after covering even the accumulated losses in the previous years. This was mainly due to increase in spread compared to burden of the bank. The spread has increased due to increase in interest income of the bank. The spread has increased by Rs. 384.36 lakhs in the year 1994 as against the burden which has increased by Rs. 41.85 lakhs resulting in to a profit of Rs. 342.51 lakhs. But after adjusting accumulated losses of the previous year Rs. 322.01 lakhs, the bank was left with Rs. 20.50 lakhs profit. Really it was a remarkable performance and excellent recovery due to the "turn around" strategy adopted by the chairman which was effectively implemented by the staff of the bank that has resulted in the reaching of a total turnover of more than Rs. 300 crores.

(b) Spread, Burden and Profitability Ratios of Malaprabha Grameena Bank

The results of the ratio analysis of the MGB for the period 1976 to 1994 were presented in Table 4.9. The table and the yearwise data, showed that the bank has earned profit in the first year, but incurred losses in all the years of the establishment period. The magnitude of loss was found to be declining except in the year 1978 (Appendix VI). On an average the bank has incurred a loss of 78 paise for Rs. 100 volume of business in the establishment period. This was mainly due to a higher burden ratio compared to spread ratio, since the bank has to incur more expenses on manpower and other expenses to cover more area through increased branch net work.

The profitability ratio in the year 1982 of the development period was higher compared to previous year. This was attributed to both increase in spread and decline in burden ratio. The spread has increased due to increase in interest income and on the other hand the burden has declined, since the manpower expenses and other expenses decreased from the preceding year. Subsequently, the profitability started declining up to the year 1989, due to a higher rate of growth in burden ratio compared to a lower growth in the spread ratio. The spread ratio has declined due to increase in the interest expenditure ratio. The burden ratio growth rate was mainly influenced by increased manpower expenses.

The profitability ratios in the years 1992 and 1993 were found to be negative due to a higher burden ratio compared to spread ratio. The spread ratio had declined because of decreased interest income ratio and on the contrary the burden ratio has increased due to increased manpower expenses. However the interest expenditure ratio and other expenses ratio were found to decline from the preceding years. The possible reasons attributable for negative profitability were the adoption of Agricultural and Rural Development Relief Scheme of 1990 by the Government in which the interest portion of the loan amount was written off. Another reason was the revision of pay scales of the MGB employees on par with other banks which has increased the manpower expenses ratio and resulted into losses.

Towards the end of development period, the bank has been able to recover fully and was in a position to earn profit thus the profitability ratio was turned to a positive ratio. The reasons were both quantitative and qualitative. The quantitative reasons were increase in spread ratio due to increase in interest income ratio and decline in interest expenditure ratio. The burden ratio has declined mainly due to decline in manpower expenses ratio and increase in non interest income ratio to the bank. These quantitative changes were possible due to the efficient and plausible policy decisions implemented by the chairman and dedicated staff members of the

bank. The range of profitability of the bank was found to be between one paise to 73 paise for hundred rupees volume of business which implied that the bank has been concentrated mainly on providing credit facilities to unbanked and underbanked areas especially to the target groups as a service and earning of profit has been the next objective for the bank. In majority of the years the bank had positive profits which implied the efficient management of spread and burden of the bank. On the whole it can be said that overall financial management of the bank was satisfactory, since the losses have been minimised (-0.14 paise) and the recent policy changes in respect of advances upto 60 per cent for non-target groups which provided the way for cross subsidisation which would improve the profitability position of the bank in future.

5.1.3 Growth Pattern of MGB

To assess the growth pattern of MGB, eleven important physical variables and nineteen financial variables were subjected to growth analysis of the exponential form and the results have been presented in the previous chapter (Table 4.10).

5.1.3.1 Growth in Physical Indicators

The growth of number of branches were found to be significant in all the periods and a highest percent growth was observed in the establishment period (140.37%), followed by the

overall period (16.99%) and development period (4.71%). A higher growth of branches in the establishment period was quite essential because the bank has to cover more geographical area. When the major proportion of the area was covered in the first period, there was little scope to open new branches in other unbanked areas, due to the limited area of operation. Thus the growth rate of branches in the development period had declined. Moreover, the branch expansion has been exclusively controlled by the RBI by way of issuing licenses after satisfying the required norms.

The family coverage per village was found to be significant only in development period (17.12%) and overall period (18.05%). A non-significant growth (16.76%) was observed in the establishment period. It seems the families covered per village did not keep pace with the increase in number of branches and manpower in the establishment period. Further, the borrowers in the villages itself might be lower even though the villages covered increased.

The number of villages covered by the bank in the establishment period was higher (213.93%)followed by overall period (17.23%) and were found to be highly significant. Growth rate of villages covered in the establishment period was more due to increased number of branches in different localities covering number of villages. On the contrary the villages covered during the development period declined (-

0.99%) and found non significant. This was mainly due to the introduction of service area approach in which certain number of villages were allotted to a particular financial institution. As a result, the MGB had to relinquish some villages to other financial institutions in it's area of operation.

The growth in manpower of the bank was found to be higher in the establishment period (87.01%), and fell down in the development period (9.09%), but overall period growth rate was higher than the development period (20.44%). A higher growth rate in the establishment period was mainly due to more recruitments to man the increased number of branches. In the development period, when the branches were saturated and opening of new branches were controlled by the Reserve Bank of India, the rate of growth in manpower declined. However the growth rate of manpower in all the periods were found to be highly significant.

The employees per branch showed negative growth (-22.27%) in the establishment period and a positive growth in the overall period (2.94%), but were non-significant. A significant positive growth (4.18%) was seen only in the development period. The negative growth in employees per branch was due to expansion of branches without substantial increase in manpower in the establishment period.

Deposit accounts growth was found to be highly significant in overall period (32.57%) and development period (9.75%). However a non-significant growth rate was seen in the establishment period (345.93%). The advance accounts grew at a faster rate in the establishment period followed by overall period and development period. Due to the coverage of large number of families in the establishment period itself the growth rate in the development period was lower with respect to both deposit and advance accounts.

Though a higher rate of growth in deposit accounts per branch was observed (85.52%), it was non-significant. The growth rate in the overall period was higher (13.42%) than the development period (4.81%) and found highly significant. A similar trend was noticed in respect of advance accounts per branch. It was clear from the above discussion that the branches and the staff have performed the functions efficiently in mobilising deposits and advances in the development and overall periods.

In the case of deposit accounts per employee, the growth rates in the establishment and development periods were found to be non significant, 136.78% and 0.50% respectively. It was found significant only in the overall period (10.07%). The possible reasons were a higher growth in manpower associated with a non-significant higher growth in deposit accounts during establishment period followed by a less than

ten per cent growth in manpower associated with a similar growth of deposit accounts in the development period. The significant growth in overall period was due to a significant higher rate of growth in deposit accounts (32.57%) as compared to the growth in manpower (20.44%).

The advance accounts per employee was found to be non-significant both in establishment period and overall period. The possible reasons could be a higher rate of growth in advance accounts compared to growth in manpower in the establishment period and overall period. A negative and significant growth was seen in the development period (-2.08%). The negative growth was due to the higher rate of growth in manpower(9.09%) compared to advance accounts (6.82%), thus reduced the advance accounts per employee.

5.1.3.2 Growth in Financial Indicators

As per the RRB's Act, every Regional Rural Bank was expected to provide advances only to target groups mainly to reduce the dependence of these target groups on money lenders. The details of the growth in financial indicators are shown in the Table 4.11. The growth in advances was found to be higher in the establishment period (345.93%) compared to overall period (48.88%) and development period (19.72%). Growth rates were significant in all the periods. The higher growth in the establishment period was mainly due to launching of massive

credit programmes to cover more area and larger section of the target groups. During the development period majority of the potential area and borrowers had been covered, thus there was a lower rate of growth, this has affected the growth in overall period.

Deposit mobilisation a vital activity for banking institution determine it's working and viability to a great extent. MGB by providing banking facilities to unbanked and underbanked rural areas given a good account of themselves by mobilising deposit funds which were locked idly otherwise with the rural populace. The growth in deposits was found to be significant in all the three periods. The rate of growth has been high in the establishment period (298.28%), followed by overall period (47.84%) and development period (25.35%). However, it was advisable for the bank to continue deposit drives as it was in the initial periods, since strong deposit base certainly facilitates to launch massive credit operations and reduces the dependence on borrowings.

The growth rate in total business was found to be high in the establishment period (319.96%), followed by overall period (48.29%) and development period (22.02%) and found significant in all the periods. The higher growth was mainly due to the higher rates of growth in deposits as well as advances of the bank.

The growth rates in income and expenditure of the bank were found to be significant in all the periods. The growth in these two indicators were observed to be higher in the establishment period followed by overall period and development period. The growth rate in expenditure was higher than the income as a result the bank has incurred losses in all the periods, even though the income growth was marginally higher than the expenditure growth in the overall period. The possible reason was that to wipe out the accumulated losses, the bank might have used it's profits, thus lead to losses in all the periods. However, the loss indicator was found to be non-significant in all the periods. This may not clearly indicate about the performance of MGB because other financial indicators have registered a favourable growth. This conclusion was in line with the observation made by Shete and Karkal (1989) in which profit was not related significantly to any of the financial variables indicating performance of the bank.

The bank has been availing refinance facility from NABARD, sponsor bank and SIDBI and also borrow the funds from the above agencies besides RBI. The growth rates of refinance and borrowings were found to be higher in the establishment period, though they were found to be non-significant (3534.29% and 3936.64% respectively). In the remaining periods the refinance and borrowings increased to keep pace with credit

deployment and thus found significant. The rate of growth in refinance was higher than the rate of growth in borrowings in the latter two periods was mainly due to prompt repayment of principal and interest to the institutions by the bank which provided refinance facility. Another reason was that the bank did not borrow the funds from RBI in the development period which has resulted in the lower growth rate in borrowings.

The bank has continued the tradition of major participation in Government sponsored programmes. It was found that though the growth rate in amount spent on Government programmes has registered a positive growth in the establishment period and development period, yet it was found non-significant. But on the overall situation the growth (88.32%) has been remarkable and found significant.

No growth was observed in respect of share capital of the bank in the establishment period because no fresh contribution of share capital from any of the agencies viz., Central Government, State Government and Syndicate Bank. The upward revision in share capital was made twice in the development period which has resulted into a significant higher growth in the development period (10.62%) and was offset in the overall period (6.18%). The share capital of the bank was increased with the main objective of providing a wider capital base to the bank for achieving viability.

Recognition of non-performing assets was a recent concept introduced by the RBI. As a result the non-performing assets appear only in the development period. These assets were non-income earning in nature and a higher growth as observed (773.20%) was not desirable. Efforts should be made to reduce the rate of growth (338.41%) in these assets further as they affect the viability of the institution.

An important indicator for evaluating the performance of the financial institution was credit-deposit ratio, which indicated the deployment of advances out of the mobilised resources. It was seen from the Table 4.11 that the rate of growth in credit-deposit ratio was higher in the establishment period (11.96%) due to higher rate of growth in advances over deposits. However the growth was non-significant. During the development period it was observed that credit-deposit ratio showed a declining growth (-4.40%) due to higher rate of growth in deposits over the advances and was significant. In the overall period, the credit-deposit ratio showed a marginal increase because the rate of growth of advances and deposits moved hand in hand. However the growth in credit deposit ratio was found non-significant (0.70%). A lower credit-deposit ratio was advisable for the bank from the view point of profitability and a declining trend in C-D ratio in the development period was a right phenomenon in this regard. As observed (Sangwan, 1989) in the past studies, that lowest C-D

ratio was associated with the largest profit making RRB's of U.P. and even of India. It corroborates the observation that more advances were not positively associated with profits of RRB's.

The growth in overdues was found to be non-significant in the establishment period (0.10%) but found significant in the overall period and development period in that order. The growth in recovery was non-significant in the establishment period which further declined in the development period (-4.30%) and registered a positive growth in the overall period. A significant increase in overdues or decline in recovery were partly due to drought conditions prevailed in the development period and implementation of loan waiver scheme.

The growth rates in respect of advances per branch were found to be non-significant in the establishment period but found significant in the development and overall periods. This was mainly due to a higher rate of growth in branches and manpower in the establishment period and a matched growth in the development and overall periods and the advances were fast progressed during development period and therefore the advances this period was found to be significant. When the multiplier effects of the increased flow of credit to the rural area was considered one could infer that, MGB was acting as a lever of rural development.

Per branch growth rate in deposits were higher in the establishment period (65.69%), followed by overall (26.39%) and development periods (19.72%). The growth rate was found to be significant in all the periods. This commendable progress could be possible due to the intensive efforts put forth by the bank staff in both the periods. No doubt in the subsequent years the bank managed to step up deposit amount but not with same degree as the bank staff paid more attention towards deployment of credit and recovery drives. Similarly, the growth in business per branch was also found significant in all the periods due to the favourable effects of both deposit and advance growth.

The growth in the advances per employee was as high as 86 per cent in the establishment period but found non-significant. Whereas, the growth was significant in the development and overall periods. This was mainly due to the massive credit deployment by the bank staff. The growth rate in deposit per employee was found to be significant in all the periods and was mainly due to the efforts of the bank staff in mobilising the deposits.

5.1.4 Pattern of Flow of Credit and Deposit Mobilisation

Advance portfolio of MGB differed from commercial banks in many respects. Under the Regional Rural Bank Act of 1976, the bank was expected to provide need based credit and

other facilities to the small and marginal farmers, agricultural labourers, artisans and entrepreneurs. They were expected to do it in such a way as to enable the recipients to improve their employment position besides improving productivity. The deployment of credit was aimed to help the beneficiaries to cross the line of poverty. At the same time to inculcate the habit of savings among the borrowers and public. The deployment of credit and mobilisation of deposits have been discussed in detail.

5.1.4.1 Purposewise Flow of Credit

As could be seen from the Table 4.12 that the crop loan accounts (24%) dominated among all borrower accounts followed by the accounts relating to businessman/small road transport operators (12%) term loan to agriculture (10%) and the least was artisan/craftsmen/SSI units (2%). This clearly showed the concern of the bank in agricultural development, especially crop output by way of financing more number of farmers. During 1991, the earlier trend was not observed and there was a marked shift in the number of borrower accounts of businessmen/small road transport operators (Appendix VII). This was mainly due to the increased participation of the bank in these programmes. However, between 1984 to 1994, based on the yearwise data, the share of crop loan accounts increased at a higher rate, where as the businessmen/small road transport operators accounts increased marginally. On the contrary the

loan accounts of term loan for agriculture, artisans, craftsman and small scale industrial units declined. But the rate of decline in term loan was higher compared to other loan accounts. This was mainly due to the introduction of non-target group lending where in the bank started advances to other non-target groups for non-agricultural purposes.

A similar trend was observed in respect of amount of advance for various purposes except in the case of term loans which occupied the second position. Due to decline in the borrower accounts, the advances extended to some purposes declined on one hand, and on the other the introduction of non-target group landing and due to unit cost lending in the case of artisans, small scale industries and craftsman lead to decline in the amount advanced for these purposes.

In order to know whether the bank has changed it's lending operations with changed technology, Kendall's coefficient of concordance (W) was computed for both the purposewise accounts and amount flow. The coefficients were worked out to be 0.856 and 0.900 for purposewise accounts and amount respectively and found significant at one per cent. This implied that there was agreement among the rankings (years) and thus no change in the pattern of purposewise credit flow.

Year to year variation was observed in the purposewise flow of credit both interms of accounts and amount

as evident from the values of coefficient of variation. The variation was observed to be higher in the case of crop loan accounts (26%) followed by term loans (20%) and the least variation was observed in the case of artisan/craftsmen/SSI units in terms of accounts (8%). With regard to the amount of advances, the variation was observed to be higher in the case of term loan accounts (33%) followed by crop loans (19%) and the least variation was seen in other purposes (11%). The reasons for higher variation in crop loan and term loans could be attributed to influence of favourable and adverse climatic conditions related to agricultural production. In a favourable crop year more number of farmers borrowed the funds and make investments in land development and crop production and vice-varsa in a bad season. As a result the variation was too much.

On the contrary, the variation in artisan/ craftsmen/ SSI units and business men/SRTO were found very low, because these were not exposed to natural calamities on one hand and on the other, the finance was provided on a unit cost basis for these activities.

5.1.4.2 Beneficiarywise Flow of Credit

A glance at the Table 4.13 indicated that the small farmers borrowers accounts were maximum among all the borrower accounts (23%). This was followed by the accounts of businessmen/small road transport operators (12%), marginal

farmers (6%), agricultural labourers (5%) and craftsman/SSI in that order (2%). Between 1984 to 1994 (Appendix VIII), the borrower accounts of small farmers were increased, at a higher rate compared to businessmen/SRTO and on the contrary the marginal farmers, agricultural labourers and craftsman/small scale industries declined. The higher number of small farmers borrower accounts indicated the importance given by the bank for financing the farmers beneficiaries to undertake agricultural crop production activities for increasing total agricultural production, because agriculture has been the dominant sector in the Indian economy which had interlinkages with other sectors. And another reason was that very recently the bank has started advancing to non-target groups as a result the growth rate in this category was slow. The craftsmen, artisan and advance accounts of small scale industries declined because the proportion of these categories was very low in the total population and due to non-viability of their operations they were not coming forward to borrow the funds for their activities because agricultural implements and other equipments have been manufactured in the industries and these have been used by many of the farmers either by owning or hiring, thus the potential of these craftsmen or artisans has been lowered.

In the case of advances to various beneficiaries, small farmers category dominated (43%), followed by small

businessmen/road transport operators (16%) and the least was in the case of craftsman (3%). A similar phenomenon was seen even in respect of amount of advances of beneficiarywise in which the advances to small farmers increased at a faster rate compared to other beneficiaries. It was observed that the amount advanced to marginal farmers, agricultural labourers, craftsmen and small scale industries registered a decline. The reasons that could be attributed were, the tradition of the bank which has been financing large number of small farmers, and recent introduction of non-target group lending increased marginally the other category beneficiaries. Contrary to this the artisans, craftsman, small scale industries and marginal farmers advances declined as they failed to make their presence felt in the rural areas due to modernisation of agriculture.

In order to know whether the bank has changed its lending operations to various beneficiaries with the changed circumstances, the Kendall's coefficient of concordance (W) were computed for both number of beneficiary accounts and amount advanced. The coefficients were worked out to be 0.958 and 0.982, which were found significant at one per cent level. This indicated no change in the pattern of advances for different types of beneficiaries.

The year to year variation in beneficiarywise flow of credit both accounts and amount were worked out. The values

indicated a higher level of variation in agricultural labourer accounts (31%), small farmers (23%), marginal farmers (16%), businessmen and the least variation was observed in the case of craftsman/SSI units (8%). In terms of variation in advances it was the highest in the case of agricultural labourers (48%), that of marginal (22%) and small farmers (17%). The least variation was observed in the case of both craftsmen/SSI units and businessmen/SRTO (11%). The variation in agricultural labourers accounts was higher due to the fact that these categories get advances under Government sponsored programmes as term loan and over the years due to increased participation of the bank in these programmes lead to higher variation. On the other hand the small and marginal farmers borrow the funds mainly for crop production and due to favourable or adverse climatic conditions induce a higher level of variation. The least variation was observed in the case of artisans/SSI units due to the fact that these categories get advances based on the unit cost and their representation in the total borrowers has been at a low level.

5.1.4.3 Degree of Concentration of Credit (Gini Coefficient Analysis)

The Gini coefficients were worked out for both purposewise and beneficiarywise flow of credit to know the degree of inequality in the distribution of credit among different purposes and beneficiaries the results of which were

presented in the Table 4.14 and Fig 11 and 12. The purpose was to know whether the bank has concentrated on a particular purpose or beneficiary for disbursement of credit.

The Gini coefficient or inequality index has consistently declined from 0.04 in the year 1984 to 0.02 in the year 1994 in the case of purposewise distribution of credit. For the beneficiarywise flow of credit, the coefficients were found to be 0.16 in the year 1984 and 0.11 for the year 1994, which indicated the overall reduction in the inequality. The Gini coefficients for the overall period of 1984 to 1994 worked out to be 0.02 and 0.12 for purposewise and beneficiarywise flow of credit respectively. This has clearly indicated that the bank has disbursed the credit facilities among different purposes and beneficiaries equitably and not concentrated on a particular purpose or beneficiary. Though the inequality values were found to be lower, both purposewise and beneficiarywise in the individual years as well as in the overall period, yet the degree of inequality was found to be relatively lower in the case of purposewise flow of credit than the beneficiarywise flow of credit which advocates that the bank has to pay little more attention in the beneficiarywise flow of credit so as to attain greater equality in the distribution of credit.

5.1.4.4 Pattern of Deposit Mobilisation

It could be seen from the Table 4.15 that the major components of deposits of MGB were fixed deposits, savings bank deposits and current deposits. Among these deposits, the lion share was held by fixed deposits (59 to 63%) followed by savings bank (35 to 39%) and the current deposits share was the least(1.2 to 1.7%). On one hand deposit accumulation helps the bank in strengthening the capital base, but on the other hand from the point of view of cost, the deposit mix has to be properly maintained. The bank has crossed one hundred crores deposits by 1992-93 which was considered as a landmark in deposit mobilisation.

The growth in deposit was found to be higher in the case of fixed deposits, followed by savings bank and current deposits over the years. During the year 1994, the growth rate in current deposits was higher (52%) than the savings deposit (37%) and fixed deposits(31%). This was observed to be a healthy trend, because fixed deposit and saving bank deposits bear a higher interest rate compared to current deposits and would add to the cost on deposits and reduce the profitability. But in the recent year, the growth rate in current deposit has over taken the growth in other deposits, thus reduced the cost of total deposits. Even though the scope of mobilising current deposits in rural areas was much less, still the bank has made good efforts in mobilising these deposits which was regarded as an appreciable fact.

5.1.5 Measurement of Branch Performance

With the objective of measuring the branch performance and to classify them in to good, satisfactory and poor categories, an attempt was made through scaling technique to develop a suitable methodology for measuring the branch performance considering multidimensional aspects relating to branches. For this purpose twenty variables comprising nine physical and eleven financial indicators were considered relating to fourteen randomly selected branches.

As shown in the Table 4.16, six branches were grouped under good category and four branches each under satisfactory and poor category based on the percentile scores. The per centile scores of good category branches ranged between 14.826 to 11.211, and the satisfactory category branches had the scores of 10.415 to 8.790. Where as, the poor category branches had the scores ranging between 6.971 to 3.872. The differences in the scores of different category branches could be attributed to the better performance of physical and financial variables in the case of good category branches. This was further supported by the higher mean values (Table 4.17 and 4.18) in the case of good category branches over other branches in respect of staff, deposit amount per employee, deposit amount, advance accounts, advance per employee, deposit accounts, outstanding advances, advances accounts per employee, total business accounts, agricultural

advances accounts, allied activity advances accounts, productivity, agricultural advances, allied activity advances, overdues and recovery percentage. The deposit per employee, profit or loss and productivity variables had a higher mean value in the case of satisfactory branches as compared to good and poor branches. This may be related to the more number of staff in good performance branches. The efficiency of the employees might have been unutilised due to lack of sufficient business in the case of poor branches.

The `t' test was carried out to find out the validity of the scale in discriminating the poor performing branches with good performing one. The results of the `t' test for physical and financial variables were indicated in the Tables 4.19 and 4.20. It was found that there was significant difference in the mean of the two groups namely good and poor categories for the variables such as, deposit accounts, advance accounts, total business accounts and agricultural advance accounts among physical variables. The advances, advance per employee, productivity and allied activity advances among financial variables. In the case of satisfactory and poor category branches, the variables viz., deposit accounts, total business accounts among physical variables. Outstanding advance per employee and productivity amount among financial variables were found to be significant. No significant difference was observed between good and satisfactory branches

for any of the variables relating to physical and financial indicators. The conclusion that emerges from the study was that the methodology adopted was powerful enough to measure the efficiency of the branches and helped to categorise them into good, satisfactory and poor branches. However the fruitfulness of the methodology depends upon the careful selection of the variables in an exhaustive manner.

5.1.6 Capital Adequacy Level of the Bank

In order to assess the real financial strength of the MGB the capital adequacy norm was applied and the results have been depicted in the Table 4.21. This was not mandatory for the Grameena Banks to maintain the level of capital adequacy as per the norms of RBI. The risk weightage pattern was followed as per the RBI prescription which was based on the BIS frame work. The projected figures of risk weighted assets were calculated based on the past growth of 18% in these risk weighted assets. The revaluation potential considered was five times the book value of the asset.

The risk weighted assets, revaluation potential and working capital as well as excess capital over and above the required capital were found to be increasing over the years both in actual period as well as in the projected period. The bank had excess working capital of Rs. 13,369 lakhs in 1991-92 which increased to Rs. 18,663 lakhs in 1993-94. The projected

figures also increased from Rs. 23,575 lakhs in 1994-95 to Rs. 61,387 lakhs in the year 1998-99. Possible reasons that could be attributed for this phenomenon were many fold among them it may be due to increase in the share capital of the MGB from Rs. 50 lakhs to Rs. 75 lakhs as well as due to more quantum of advances of the bank covered by either Central Government guarantee or State Government guarantee, since the borrowers have been covered under the sponsored programmes of the Government. Based on the above discussion it can be concluded that the MGB was functioning above the capital adequacy norm prescribed by the Reserve Bank of India.

5.1.7 Break-Even Volume of Business

The break-even volume of business of Malaprabha Grameena Bank for the recent years 1991-92 to 1993-94 and the future years upto 1998-99 were workedout and presented in the Table 4.22. The table revealed that the financial margin has declined from 3.72 to 3.36 from 1991-92 to 1992-93 due to lower spread compared to burden. But once again increased in the year 1993-94 due to increase in spread. As the financial margin has decreased in the year 1992-93, the break even volume of business has to be increased as against in the previous year. When the financial margin increased in the year 1993-94, the bank was able to achieve the break-even volume of business, where as it was operating below break-even level in the preceding two years.

The projections were made for the break-even volume of business of the bank based on the past growth. During this projected period of 1994-95 to 1998-99 the transaction costs, miscellaneous income, financial margin and working funds were found to be decreasing. As a result, the bank would be functioning above the break even volume of business.

As shown in the Table 4.24 the break even volume of business of the bank for the years 1994-95 and th projected years 1998-99 were split into different components of assets and liabilities based on the relative share of these components in the balance sheet of the bank for the year 1993-94 (Table 4.23). It was observed that the bank has to increase the assets as well as liabilities to achieve break even volume of business in the year 1994-95. There was scope to reduce the borrowings by Rs. 28.06 lakhs in the year 1994-95 compared to previous year without affecting the volume of business. This was mainly due to the lower volume of break-even level compared to the preceding year due to declining risk costs and transaction costs.

In order to achieve break-even volume of business by the year 1998-99 the bank has to step up it's deposit mobilisation by Rs. 7762.85 lakhs and borrowings by Rs. 4889.22 lakhs. Similarly the advances have to be increased to the tune of Rs. 8144.90 lakhs besides increasing the balance with other banks to the extent of Rs. 3509.53 lakhs. The bank has to

attain Rs. 36565.77 lakhs business by the year 1998-99 to be in break-even which means an increase of Rs. 12768.35 lakhs volume of business from the current year 1993-94.

Out of 208 branches, as many as 67 branches were incurring losses as evident from the records of the bank. There was a need to improve the operational efficiency of these branches so that the financial margin improves and the bank would attain break-even volume without much stress on the working capital. Hence, it calls for thorough analysis of the factors responsible for branch profitability.

5.1.8 Relative Performance of the Bank (Principal Component Analysis)

The technique of Principal Component Analysis was adopted to identify the most important factors having a bearing on the performance of the bank. The technique was employed separately for physical, financial and pooled indicators of the bank and are discussed as under.

5.1.8.1 Physical Indicators

To identify the physical indicators having the bearing on the performance of the bank twelve variables were subjected to principal component analysis. Out of these variables, six variables had higher factor loadings in the first dimension, two variables each in the second and third dimension (Tables 4.25 and 4.26).

The first principal component included the variables such as family coverage per village, advance accounts, number of branches, number of villages covered, deposit accounts and number of employees, which had accounted for 54.20 per cent variation of performance of the bank. The bank has concentrated since its inception mainly on coverage of area and rural beneficiaries through branch expansion, increased number of staff to cope up with increased advances and deposits. This was clearly indicated by the principal component analysis technique which had captured these variables in the first dimension itself indicating their prime importance in influencing the performance of the bank. This was supported by the temporal performance of physical indicators as well as growth rate analysis in which these variables had a significantly higher growth (4.1 and 4.10). As this component throws light on the extent of coverage so it was designated as "Coverage" component.

The second principal component was able to explain 14.70 per cent variation in performance of the bank and captured two indicators namely non performing assets accounts and advance accounts per employee. These were considered as the next best variables influencing the performance of the bank. These indicators reflect the efficiency of the bank and employees. This may be termed as "Efficiency" component. Decreased non-performing assets and increased advances per

employee will have a favourable influence on the performance of the bank, since the non-performing assets did not yield any returns and on the other hand keeping the establishment expenses constant as the advances increases, the income increases, thus more spread will be available to the bank.

Third principal component captured the variables such as deposit and advance accounts per branch which accounted for 10.70 per cent in influencing the efficiency in the working of the bank. In otherwords, the branch performance would also affect the overall performance of the bank and this concept has been recognised recently. This component may be designated as the "per branch efficiency" component.

From the foregoing analysis of physical variables indicated that there were three important dimensions which influence the performance of the bank. The first and the most important was connected with the coverage and the second related to general efficiency of the bank and lastly the per branch efficiency.

5.1.8.2 Financial Indicators

In order to know the important financial variables which had their association with the performance of the bank the selected nineteen financial variables were subjected to principal component analysis and the results are discussed here under in detail.

Eleven variables had the higher factor loading on first principal component which extracted 55.30 per cent of the total variation that could be attributed to the resource structure of the bank. The five variables on the second component accounting for 25.20 per cent variation signifying the importance of the profitability dimension of the variables. The third component captured three variables and was able to explain only 9.60 per cent variation (Tables 4.27 and 4.28) that placed importance on management of bad debt and liability.

The first dimension captured the variables related to resources and advances. The variables were deposits, share capital, refinance, recovery, which helped in collection of resources of the bank and played a major role in providing a sound financial base for lending activities of the bank. This was supported by the significant higher growth rates in these variables (Tables 4.2 and 4.11). The resources collected were judiciously advanced to beneficiaries of Government programmes and other borrowers maintaining a small proportion of the resources in the form of liquid assets which was evident from a little lower ratios of current ratios and acid test ratio. The performance of these financial indicators would have a influencial role in the performance of physical indicators of the bank. Profitability aspect was captured in the first component itself which has brought profitability to forefront,

a most talked subject in the present context for stability. Based on the above discussion, this component may be termed as "Resource mobilisation and Credit Deployment" component.

Second component captured the variation in the five variables to the extent of 25.20 per cent which were grouped in this component. The variables were advances, deposits, total business, income and expenditure which were related to the profitability aspects of the bank. Thus this component may be termed as "Profitability" component. These variables have their effects on spread and burden of the bank which results into ultimate profitability. In the present context the concept of profitability has gained lot of importance for sustainability in the longrun for any institution. It was supported from the spread, burden and profitability analysis, that the bank was able to earn profits though the magnitude was lower. This was an clear indication of efficient management of financial portfolios and proved that the service to rural folk was primary objective of the bank and profitability was relegated to the second place. As a result the profitability related variables have been captured in the second component in the principal component analysis which has no doubt a decisive role in assessing the performance of the bank.

Third dimension was able to explain 9.60 per cent of the variation and included the variables as, credit-deposit ratio, non-performing assets amount and borrowings. This

component may be termed as "Liability and bad debt" component. Increase in all these three variables would add to the cost of the bank and increase liability of the bank. Too much higher level credit-deposit ratio means higher interest expenses since the bank has to depend on external borrowings and call money market. When the risk cost and transaction costs were added, the situation becomes still bad. It was found from the ratio analysis that whenever the credit-deposit ratio was higher the profitability has suffered. And when the credit -deposit ratio had declined towards the end of the development period, the profitability position has improved. Similarly increase in the magnitude of non-performing assets amount results into adverse impact on the performance of the bank, since such types of assets were not earning any interest on one hand and unnecessary blocking of funds on the other.

5.1.8.3 Pooled Analysis of Physical and Financial Indicators

An attempt was made to pool the physical and financial indicators to know which of them exert more influence on the performance of the bank instead of considering them separately. When the physical indicators considered in isolation to financial indicators, about six variables were captured by the first component, and two each by the second and third components. Other two variables were not in a position to explain much of the variation as a result they were eliminated. The first component was able to explain 54.20 per

cent variation followed by 14.70 per cent and 10.70 per cent by the subsequent components (Tables 4.29 and 4.30).

Similarly in the case of financial indicators, the first component captured eleven variables, second component another five variables and remaining three variables were captured by the third component. The variation explained by the first component was 55.30 per cent and 25.20 per cent variation by the second component where as 9.60 per cent was explained by the third component.

When a pooled analysis was made considering both physical and financial indicators, it was observed that four physical indicators could find the place in first component as against six variables. Among financial indicators, first component captured ten variables instead of eleven variables. This component was able to explain 42.00 per cent variation. The most important variables among the physical and financial indicators were extracted by this component and the variables were relating to business, income and expenditure of the bank. Thus the first component may be termed as "Business and Profitability" component.

The second component captured three physical variables and nine financial variables in pooled analysis as against two and nine variables of physical and financial indicators when these were considered in isolation. One

physical indicator and four financial indicators could find their place in the second component in addition to earlier indicators of this component. This component was termed as " resources, efficiency and coverage" component as the variables related to these aspects and could explain 29.90 per cent variation. In this component, the variables viz., number of branches, employees and family coverage per village had negative signs, that implied, there was a need to intensify the lending operations within the area of operation. The more intensive is the area of operation, higher is the deposit, advances, business per branch and per employee as well as higher participation in Government Programmes.

In the third component only physical variables were captured because all the financial variables were captured in the first two components. The variables were employee per branch, deposit accounts per branch and advance accounts per branch and all these variables had a negative sign. This implied the need for intensifying the transactions of the bank to reduce the transaction costs and establishment expenses. This component was able to explain 16.70 per cent variation.

From the above discussion, it can be concluded that the financial variables were relatively more important than the physical variables which decide the performance of the bank. In other words efficient portfolio management, burden and spread have been the most important aspects related to performance of the bank besides coverage and recycling of funds.

5.1.9 Overdues of the Bank

Recycling of funds has been regarded as one of the major determinants of credit expansion. Overdues come in the way of viability and sustainability of the institution. If the overdues were mounting, the bank has to make arrangements for additional funds through deposits or borrowings.

5.1.9.1 Demand, Balance and Recovery Position of Malaprabha Grameena Bank

The demand has increased over the years except in 1992 as could be seen from the Table 4.31. The recovery of funds showed an increasing trend from 1982 to 1988, but declined in the next two years and once again started increasing. The overdues increased consistently from 1982 to 1990 except in 1991, wherein the overdues declined from the previous year. The bank had made all out efforts to keep the overdues at the minimum level. From 1982-84, the overdues were around 40 per cent due to the efforts made by the staff members in collection of the amount financed by the bank. But from 1985 onwards upto 1990, the overdues mounted mainly because of twin reasons. Firstly it was due to drought situation prevailed from 1985 to 1989, which was exogenous factor and beyond the control of any body. Under such circumstances, the bank has converted the short duration loans to longer periods and advanced fresh loans to combat against drought. The second

reason was the declaration of loan waiver scheme in 1989, and many farmers did not repaid the amount borrowed in anticipation of loan waiver.

The per cent overdues to demand in the last five years from 1990-1994, have been declining (71-44%). In the year 1991, overdues have declined from the previous year by 23 per cent. This was mainly due to implementation of Agricultural and Rural Debt Relief Scheme on one hand and conducting recovery camps, recovery competitions, formation of task force at branch level, execution petitions against willful defaulters, convincing the defaulters about the legal complications and appointment of special recovery Tahasildars.

5.1.9.2 Agewise and Sectorwise Overdues of the Bank

It was observed from the Table 4.32 that the overdues upto one year had decreased from 1991-92 to 1992-93 to the extent of 15.19 per cent. Where as other category overdues showed an increasing trend and the rate of increase was highest in the case of overdues of above five years, followed by overdues between 3-5 years and the least per cent increase was seen in the case of overdues of 1-3 years duration. The decline in one year overdue was mainly due to bumper crops obtained during the year resulting in to increased income levels of the farmers to make payment of their dues. On the contrary the increase in overdues was attributed to the

residual effect of the implementation of the Agricultural and Rural Debt Relief Scheme in the year 1990, in which few beneficiaries who satisfied the norms got the benefit of waiver, but it had negative impact on other beneficiaries who did not repaid the dues in anticipation of such waiver.

Between 1992-93 and 1993-94, the overdues upto one year had increased due to heavy rains which lashed the crops besides slump in agricultural prices. Where as the other category overdues declined and the rate of decline was the highest in the case of overdues between 3-5 years followed by overdues of more than five years. The declining trend was mainly due to the settlement and recovery of overdue cases through Lok Adalat, efforts of special recovery squad, task force and special Tahasildars recovered the overdues through legal actions.

In the case of sectorwise overdues, both agricultural sector and non agricultural sector overdues had increased and the rate of increase was higher in the former sector compared to the latter between 1991-92 to 1992-93. This was mainly due to the more overdues in crop loan category of the farmers. Interestingly the other category overdues viz., Indirect finance for agricultural loans and non performing advances registered a decline to the extent of 8.23 per cent in the same period. This was mainly attributed to the fact that the IFAL loans which were used to finance for community

sprinkler irrigations have been stopped and effective recovery measures were taken to reduce the non-performing advances.

A comparison between 1993-94 and 1992-93 indicated that the agricultural sector as well as non-agricultural sector overdues showed a decline, where in the rate of decline was higher in the latter sector compared to the former. This was attributed to the concerted efforts made by the bank staff in recovery of overdues. Interestingly the other category overdues (IFAL and NPA) registered an increasing trend. This was due to the conversion of dues into non-performing assets in order to claim the amount from Credit Gurantee Corporation as a result showed an increase.

5.1.9.3 Activitywise Overdues of the Bank

The overdues between 1991-92 and 1992-93, in respect of small scale industries/cottage industries, allied activities, agricultural investment, short term credit and retail trade have increased (Table 4.33). On the contrary the overdues relating to non performing assets and indirect advances registered a negative change. The increase in overdues was mainly due to the implementation of Agricultural and Rural Debt Relief Scheme which had its adverse effects on repayment discipline of borrowers. Other category overdues declined because of concerted efforts of the staff. A comparison of the years 1992-93 and 1993-94, indicated an

increase in respect of overdues of the categories like indirect advances, agricultural investment and non-performing assets in that order. Interestingly, the overdues in respect of small scale industries, short term advances, allied activities, and retail trade registered a decline in that order. The increase was mainly due to claim from credit guarantee corporation and decrease was associated with efforts of the bank staff.

5.1.9.4 Overdues Analysis of Willful and Non-willful Defaulters

Discriminant function was used to classify the defaulters into willful and non-willful on the basis of selected characteristics and the results have been depicted in the Table 4.34. It was seen from the table that, out of the five characteristics, education and income levels were the two important characteristics classifying the defaulters into willful and non-willful. The power of these two characteristics in discriminating the two groups were found to be 59.33 per cent and 21.42 per cent respectively. The positive value of the coefficients implied that the education level and willful default were directly related. Similarly the family size and willful default were also positively related to each other. The possible reasons could be, due to their increased level of education, the defaulters might have acquired the knowledge about likely changes in the Government policies relating to loan waiver or interest waiver schemes and started anticipating

such concessions. And also it was observed from the discussions with the bank officials and the defaulters that, when the case was filed, against the defaulter, the judiciary had exempted some portion of the interest as per the existing rule. The educated defaulters might have tried to misuse this clause for their vested interest and thus not repaid the loan purposively.

Higher proportion of the income of the defaulters was spent on maintenance of the family, thus increased the family expenses. This has inturn might have lead to diversion of income to meet the family expenses, rather than for payment of loan. With regard to the remaining three variables, the results obtained were found to be similar to the findings of the other researchers namely Sarup and Pandey (1982), Chand and Sidhu (1985) and Kalyankar and Rajmane (1987). However, the co-efficients observed to be non-significant in discriminating the two groups.

The discriminant function was employed to classify the defaulters into willful and non-willful (Table 4.35) efficiently as evident from the lower percentage (12.5 per cent) of misclassification by the function.

5.1.10 Association between Managerial Efforts and Business Performance

It was observed from the Table 4.36 and Fig 13. that over the years the number of circulars issued to provide the

latest knowledge have increased. The emphasis has been shifted from increasing the advances to human resource development and planning aspects. The management has realised that quantitative developments could be achieved in a better and convincing manner through proper management of human resources. The management in the ' turn around' period has laid equal emphasis on all aspects relating to the bank, more particularly on human resource development. Welfare schemes, honours, prizes, and other means of recognisation of the efforts of the employees were adopted to improve the efficiency. The powers have been decentralised to make the administration more transparent and elastic according to changed situations. As a result the deposits, advances, total business, recovery and productivity have shown an increasing trend. The bank which was under heavy losses has been turned into a profit making bank, through proper human resource management and the credit goes to the key personnel who were responsible for introducing this new innovative technique of management.

5.2 IMPACT OF MALAPRABHA GRAMEENA BANK

5.2.1 Credit Share of Malaprabha Grameena Bank

An attempt to assess the performance of MGB in the District credit plans in it's operational districts would naturally throw light on it's impact on the development of the region. During the year 1989-90, the bank was able to cross the target fixed and the per cent achievement was the highest

(124%) among the institutions as well as against the overall average (73%). Similar trend was observed over the years with little variations in targets, achievements and per cent achievement by different financial institutions. During the year 1993-94 also, MGB crossed the target fixed and achieved a record per cent of the target (154%) which was not only the highest among the institutions (116%) in that year, but also highest for the last five years (Table 4.37).

Overall for the last five years, the Achievement of the MGB has been higher than the target and interms of per cent attainment it was more than 100 per cent as compared to other institutions (80%).

From the above discussion it was clear that the share of the bank both interms of outlay and achievement had increased over the years in the operational districts that indicated the contribution made by the bank towards the development of the districts. As the commercial banks and cooperatives were involved in the implementation of District Credit Plans, even the 18 per cent share in the total by MGB was by no means a small achievement.

Thus, by accepting sizeable shares in District Credit plans of the two operational districts, MGB has been playing a major role in the development activities of these districts. This could be possible with it's massive branch expansion

programme, even to the remote parts of the district and maintaining effective linkages with the developmental agencies of the district.

5.2.2 Impact of Malaprabha Grameena Bank Finance on Borrowers

The impact of Malaprabha Grameena Bank finance on different categories of beneficiaries in the selected branches of the bank interms of changes in income and employment in the pre-loan period and post-loan period have been analyzed and discussed as below :

5.2.2.1 Impact on Income of Borrowers

The impact of bank finance on income of the borrowers has been presented in the Table 4.38. The table revealed that the bank finance had a favourable impact on the income levels of all categories of beneficiaries because availability of finance has enabled them to invest either in new opportunities or to expand and improve existing business so as to reap higher income. The incremental income was found to be higher in the branches which were categorised as good performance branches. This was mainly due to the good infrastructure facilities possessed by these branches and the credit discipline among the borrowers. Among different categories, the income generation was found to be higher under the farmer category followed by businessmen, artisans and agricultural labourers. The farmers were capable of generating

a higher level of income due to the change in cropping pattern towards commercial crops and use of more inputs in production which has increased the productivity.

The income levels of businessmen were also higher due to their higher profit margins and more turnover. Artisans were in a position to earn a reasonable level of incremental income by way of providing service to agricultural sector. Some of them were owning improved machineries which helped them to prepare spare parts at the village level and attend to minor repair works of machineries and implements thus got a higher level of income. The agricultural labourers were used to work on wage employment on the farms of other farmers. Since agricultural operations were seasonal, the agricultural labourers were not employed throughout the year and they were underemployed. The bank finance had helped them to purchase income generating assets like milch cattle, sheep and goat which have not only yielded income but also provided employment during off season and lead to increase in income.

Branchwise analysis of the income generation by different categories of borrowers revealed that in Arekurahatti (Rs. 26,300) and Tirlapur(Rs.23,600) branches, the farmers were able to generate more income compared to the farmers of other two branches. This was mainly attributed to the utilisation of irrigation potential which has increased the productivity of the crops especially commercial crops. Other branches were

devoid of irrigation facilities and have to depend on rainfall and the productivity of the crops were very low. Similarly agricultural labourers were able to generate more income in Arekurahatti branch due to the availability of fodder to milch animals, sheep and goat.

The businessmen belonging to Nesaragi (Rs. 10,500) and Arekurahatti (Rs.9,700) were able to generate more income. The possible reason was these two villages were highly developed in all aspects due to good transportation network. Similarly the artisans belonging to Nesaragi (Rs.3,650) and Khanagaon (Rs.3,050) branch earned more income compared to other branches owing to infrastructure facilities available in these villages for business development. Thus the overall situation concludes that the bank finance had a favourable impact on the income levels of beneficiaries. However, in relative terms, the agricultural labourers and artisans categories were in a position to generate more income compared to farmers and businessmen. This was mainly due to the lower levels of income of these categories in the pre-loan period which has resulted into a substantial increase in income in the post-loan period.

5.2.2.2 Impact of Bank Finance on the Employment of Borrowers

The results of the impact of bank finance on the employment of borrowers has been depicted in the Table 4.39.

It was observed from the table, that the bank finance had a favourable influence on the employment of borrower families in all the selected branches as well as in all the categories of beneficiaries. On an average, the farmers in irrigated area branches were able to generate more employment compared to dry area branches. The reasons were, the availability of irrigation, infrastructure, credit and other inputs in agricultural production. Due to the availability of more credit per borrower, besides the support of infrastructure and other inputs, lead to changes in cropping pattern and use of more inputs, which has increased employment. On the contrary, in dry area branches, the cropping pattern adopted was mainly to suit the rainfall pattern and the intensity of input use and cultural practices were less, which were responsible for creation of a lower level of additional employment opportunities.

A comparison of the good performance with that of lower performance branches indicated a higher level of employment generation in the former category compared to latter category branches. The reasons were the highly developed infrastructural facilities, in the form of good roads, irrigation, input supply agencies, transportation conveyance etc helped to create employment potentials in agricultural and non-agricultural sectors of the rural economy.

The extent of employment generation in irrigated area branches was found to be the highest in the case of businessmen (58.98%) and the least additional employment was generated in the case of artisans (37.84%). Due to the availability of more credit to businessmen from the MGB, their higher profit margin in business and higher volume of business necessitated them to employ hired labourers to handle the business. Artisans were not in a position to create more employment due to lower amount of credit provided to them on one hand and on the other their services were not fully utilised by the villagers, since many equipments and machineries used in agricultural production were being manufactured and repaired by small industrial units in nearby towns. Thus they were underemployed.

In dry area branches, the businessmen were able to create more additional employment (65.52%) mainly due to increased volume of business as a consequence of more amount of credit from MGB. On the contrary, the farmers (22.98%) were able to create a lower level of additional employment on their farm mainly due to the rainfed area, lower intensity of input use, adoption of non-labour intensive practices in crop production and lower productivity of crops. However, during peak seasons of sowing and harvesting, hired labourers were employed to some extent to cope up with the seasonal work. Based on the above discussion, it could be concluded that the MGB finance had a positive impact on employment generation, a higher degree of which was seen in irrigated areas, and in the case of non-agricultural sector.

5.3. ASSESSMENT OF THE WORKING OF MALAPRABHA GRAMEENA BANK

The opinions sought from the policy makers, officials, borrowers and other bankers were analysed, separately and the outcomes had been discussed as under.

5.3.1 The working of Malaprabha Grameena Bank in the Opinion of its Policy Makers

The opinions sought from the policy makers were subjected to cluster analysis in which an inter correlation matrix of 20 X 20 was designed to accommodate 20 variables identified relating to the performance of the bank. The similarity measure or degree of association between all possible variables were computed for the purpose of comparison.

It could be seen from the Table 4.40 that a decreasing trend was observed in the similarity measure from the first cluster to the last cluster, which implied relatively lower degree of agreement among the variables. The similarity values declined from 100 to 61, when the clusters were formed. A cluster with lower similarity value implied the lower importance of that cluster in the working of the bank and vice-versa.

The selected 20 variables were accommodated in three different clusters based on their similarity measures in which as many as 13 variables were in the first cluster, another

four in the second cluster and remaining three variables in the third cluster.

The first cluster which was designated as high aggregate cluster whose similarity values ranged between 100 to 93, reflected that the impact of education and experience was very high on policy makers. It also exhibited that adequacy of staff, services provided to farmers, impact of credit and supervision were of high degree. The cluster also highlighted a very high opinion of policy makers about communication and coordination within the bank as well as communication among the banks such as sponsor bank, NABARD, RBI and other commercial banks in the area of operation including the lead banks. Apart from this it also highlighted the problems encountered in the working of the bank which were of general, financial and miscellaneous in nature.

The second cluster which was termed as medium aggregate cluster had the similarity values ranging from 92 to 87. This cluster emphasised the high degree of performance indicators of the bank. It also highlighted the efficient bank management, coordination among banks and greater awareness to Government policies.

The low aggregate cluster had the similarity scores ranging from 67 to 61 and included only three variables namely decision at the head office, education levels of the employees

and effectiveness of training. This lower aggregate cluster indicated the need for bringing about improvement in the variables for better working of the bank, since they had comparatively lower similarity values compared to other variables found in the other clusters.

5.3.2 The Working of Malaprabha Grameena Bank in the Opinion of its Officials

The opinions obtained from the officials relating to the performance of Malaprabha Grameena Bank were grouped into different clusters based on their similarity measures. From the Table 4.41, it was seen that the variables in high aggregate cluster reflected the high degree of managerial capacities and supervision of branches and subordinates. There was greater degree of co-ordination within the bank as well involvement of officials in the affairs of the bank which resulted into a high degree of impact. It also highlighted the problems relating to financial aspects and miscellaneous ones. The similarity values of this cluster were ranging from 54 to 46.

The medium aggregate cluster included four variables namely bank management, general problems, training and communication within the bank. This cluster needed certain amount of attention for improvement so that the working of the bank could be improved.

In the low aggregate cluster the similarity values were ranging from 37 to 28. The variables included were education and experience, functioning of the board, performance indicators, execution of plans and policies as well as communication among banks. These variables were considered as the area of immediate concern and deserve the attention of policy makers as well as officials of the bank for improvement.

5.3.2.1 Comparison of Scores of the Policy Makers and Officials of the Bank

A comparison was made in respect of scores assigned by policy makers and officials for the common variables relating to the performance of the bank. It was observed that there was large variation in the similarity value assigned to each variable by both the respondents. There were 11 common variables and the similarity values ranged from 100 to 61 in respect of policy makers and in the case of officials the corresponding figures were ranged from 54 to 28. The key variables namely, performance indicators had a very high similarity value (92) in the case of policy makers. Whereas, it attained a low value (35) in the case of officials of the bank. From the above comparison, it was clear that the policy makers gave relatively more importance for the performance indicators in evaluating the working of the bank, as compared to that assigned by the officials. A similar phenomenon was observed in respect of impact indicator also in which the value assigned by

the policy makers and officials were found to be 95 and 49 respectively.

It was observed from the scores assigned by the two groups of respondents, that the policy makers assigned higher scores compared to officials of the bank. However, both the groups admitted that there was good communication and coordination within the bank and the bank had efficient management. The bank was mainly carrying out it's operation for the upliftment of weaker sections in rural areas dealing with unorganised rural sector, besides illiteracy had to face lot of financial, general and miscellaneous problems, which was admitted by both the respondents. Most of the opinions expressed by the policy makers and officials of the bank in respect of performance of the bank were in confirmity with the results of the quantitative techniques employed in evaluation of the performance of the bank.

5.3.3 The Working of the Malaprabha Grameena Bank in the Opinions of other Bankers

The opinions expressed by other bankers operating in Belgaum and Dharwad districts about the performance of Malaprabha Grameena Bank have been discussed as under

5.3.3.1 Opinions of other Bankers on the Performance of Malaprabha Grameena Bank

The opinions expressed by other bankers about the performance of Malaprabha Grameena Bank have been presented in

the Table 4.42. It was observed from the table, that the respondents had a good opinion about the deposit mobilisation, (58%) participation in Government programmes (75%) and participation in district credit plan and the achievement by this bank (92%). The opinions expressed by the other bankers endorsed the quantitative results obtained from the analysis of physical and financial variables in which the deposits mobilised by the bank crossed a land mark of Rs. 100 crores. The participation of the bank in terms of disbursing the amount for Government sponsored programmes and participation in district credit plan and thereby it's achievements have been remarkable.

A satisfactory opinion was expressed by the respondents relating to the indicators branch expansion (67%), advances, (50%), customer service (58%) and profitability (50%). The branches established by the bank during 1976 to 1994, increased in manifold covering unbanked, underbanked and remote corners of the area of operation. The branches have been widely spread and providing banking facilities to rural population. The bank has been advancing credit facilities to different types of beneficiaries belonging to target groups for their upliftment both in social and economic fronts. Recently, even the advances were being extended to non-target groups also. The customer service extended by the bank was also felt satisfactory from the view point of other bankers which was

supported by an increasing trend in deposit accounts and borrowers over the years. The other bankers viewed malapraba Grameena Bank as an service oriented institution and assessed profitability aspect as satisfactory even though the bank has incurred losses. But it recovered in the recent years and able to earn profit besides providing the untinted services to rural masses.

A poor ranking was given by a few respondents in respect of advances to beneficiaries (17%), participation in Government programmes (8%) and profitability aspects (17%). The bankers were mostly under the notion that the Malaprabha Grameena Bank was meant for advancing loans only to target groups and may not advance loans for other categories and as a result expressed this opinion. But recently the policy has been changed and the non-target groups can also avail the credit facilities from this bank. Few bankers mostly viewed the amount of disbursent under Government sponsored programmes in absolute terms in relation to big banks, thus they found it a meagre amount disbursed by the bank and as a result they might have expressed a poor opinion about this aspect. But in relative terms the achievement of the bank has been magnanimous. Only those bankers that viewed the losses incurred by the bank ranked the bank as poor in the area of profitability. But in the recent years, the bank has been able to recover the accumulated losses and earned Rs.20.50 lakhs profit.

5.3.3.2 Opinion of other Bankers on the Policy Matters of Malaprabha Grameena Bank

The opinions expressed by the other bankers relating to policy changes of the Malaprabha Grameena Bank have been indicated in the Table 4.43. The table revealed that about 42 per cent respondents favoured the separation of Malaprabha Grameena Bank from it's sponsor bank to provide more liberty to function as an independent institution so that the present restrictions could be minimised. On the contrary around one fourth of the respondents opined that these banks have been brought up under the guidance and supervision of the sponsor bank and they need this support for their functioning

On the issue of recent relaxation made with respect to lending to non-target groups, it was supported by fifty per cent of the respondents. For sustainability of an institution in the longrun profit making is an essential factor and lending to target groups at a lower rate of interest, may not help the banks to earn profits as a result they incurred losses. Instead of this if part of the funds were lent at a higher rate of interest, it gives an opportunity to cross subsidisation and improves the viability. On the contrary, equal proportion of the respondents opposed this policy change, because these RRBs were established mainly for weaker sections and by lending to non-target groups in higher proportion would definitely lead to loss of their identity as poor man's bank

and they were no more different than any commercial banks. This would affect the interest of target sectors as well as lead to dominance of non target groups in cornering the benefits which otherwise would have gone to weaker sections.

The MGB was not permitted to operate any NRI accounts and financing of export business. This area could be effectively tapped for improving profitability, under the changed economic scenario due to economic liberalisation. The funds may flow in large sums from non-resident Indians and the same could be effectively utilised for lending operations. There is a greater need to create an atmosphere in the rural setting to derive the benefits of export of commodities, otherwise the lion share would be parted by the middlemen involved. Another 42 per cent of the respondents were of the opinion that, there were specialised banks to take up these activities and RRB's specially meant for rural lending and they were expected to concentrate on these activities instead of diversion of their goals.

For a higher level of profitability, the non-funded business of the bank could be increased to a higher level as envisaged by 58 per cent of the respondents, since the bank funds were not employed in larger sums and the return would be accruing to the bank. This could improve the profitability position of the bank. As against this, 25 per cent of the respondents indicated that due to increase in non-funded

business, there was every chance, that the bank may not be efficiently discharge the activities concerned with funded business due to diversion of attention from funded to non-funded business.

Many commercial banks have been permitted by the Reserve Bank of India to float shares and debentures for widening the capital base. About 59 per cent of the respondents opined that the RRBs capital requirement was not as high as the commercial banks and could be met by the sources deposits and borrowings. Even if they float the shares/debentures, they may not be able to mobilise larger capital since the bank was incurring losses. Earning per share, an yardstick for investment would be always considered by the investors. On the other hand about 33 per cent of the respondents opined that the bank could be permitted to float shares/debentures to augment capital instead of borrowing or through deposits. If capital is collected through shares/debentures, the funds available with the bank would be intact and the shares/debentures would be transferred from one title holder to other. They also opined that a limited number of shares/debentures be issued and the Government, employees of the bank and other institutions subscribe towards these shares/debentures. When the investment becomes attractive then the public make investments on these shares or debentures of the bank.

5.3.4 Opinions of Borrowers about the Malaprabha Grameena Bank

The valid opinions of the borrowers regarding the Malaprabha Grameena Bank have been depicted in the Table 4.44. The table revealed that, on an average about 35 per cent of the respondents opined that the procedure in getting the loan was cumbersome and the major proportion of the artisan category borrowers faced this problem. The respondents expressed that getting the various documents from different institutions was a great problem which consumed lot of time and money. Some of the borrowers were of the opinion that the bank officials do not give proper guidance at once about the type of documents they need for sanctioning the loan, which consumes lot of time and resources. Even some regular borrowers which had a god past record with the bank for more than a decade were also expected to provide all these documents every year to get loan. They pleaded for eliminating some of these documents and extend the facility of soft loans in the form of overdraft.

Majority of the respondents in all the categories (81%) were of the opinion that the amount financed was inadequate and invariably they have to depend on some other non-institutional source for getting required funds. In the case of agricultural labourers category, the funds were advanced for the purchase of milch animals, sheep and goat where in the unit cost was lower than the actual market value of the animals. Hence, the borrowers with poor resource base

find it too difficult to contribute which may lead to purchase of lower quality assets. Similarly the businessmen, farmers and artisans also felt that the limit of finance has to be revised so as to take up the activities efficiently.

The technical guidance required by the borrowers has not been forthcoming from the bank officials which was mainly due to lack of technical knowhow on one hand and paucity of time on the other. Timely technical guidance would help to run an enterprise on profitable basis. However, the bank has been trying to provide technical guidance through organising various types of extension activities for the benefit of borrowers. So far as the supervision of loan was concerned, the bank officials have not identified this as an important aspect to check the mis-utilisation as well as improved use of funds. Post loan inspection helps to know the condition and the use of asset by the borrower. However, the bank officials paid some visits to verify the possession of assets in the case of agricultural labourers, artisans and businessmen where in the assets were tangible in nature and was easy for verification. In the case of crop loans of farmers, it was difficult to ascertain the use of funds for crop production due to the problem of quantification of inputs used in production.

Major proportion of the respondents (76%), expressed their happiness about the services provided by the staff. On questioning about the source of help the borrowers received in

transacting their business, the researcher came to know that majority of the borrowers got the help of bank staff. Relying on bank staff in majority of the cases revealed the good gestures exhibited by the banker towards the customers.

With regard to the reasons for borrowing from Malaprabha Grameena Bank, more than 65 per cent of the respondents preferred to borrow from MGB because of neglect by other institutions, exploitation by money lenders and timely availability of loan. Money lenders, Co-operative societies and banks do not provide more amount of credit and for long term purposes. They were not interested in encouraging artisans and agricultural labourers wherein security of the funds was a problem. Taking this opportunity, the money lenders tried to exploit the borrowers to the extent possible. Crop loan borrowers expressed that the funds were not released timely by other institutions and in the kind component they were not having any choice of inputs, inspite of a higher price they pay than the market. More than 75 per cent of the respondents felt that the cost of credit was lower, both interest cost and non-interest cost. To get loans from Co-operative institution, they were expected to contribute share capital and spend more money to get the credit. Where as in the case of MGB, the borrower need not contribute share capital and cost of getting the credit was also lower. Some borrowers of small road transport operators expressed that demand draft charges, of

the loan was borne by the borrower which was not seen in the case of other commercial banks. In addition to this about 85 per cent of the borrowers preferred MGB, due to easy accessibility. Due to continuous touch of the bankers with ruralites, through better customer service, MGB staff became part and parcel of ruralites. As a result the borrowers found easy accessibility to MGB, both psychologically and physically. Hence they preferred to borrow or maintain their transactions with Malaprabha Grameena Bank.

CHAPTER - VI

SUMMARY AND POLICY IMPLICATIONS

VI. SUMMARY AND POLICY IMPLICATIONS

Agriculture continues to be the mainstay of the Indian economy and an effective antidote to poverty and unemployment. Self sufficiency in food grains and edible oils are not small achievements if viewed with steady uptrend in growth of the population despite a vigorous family welfare programme in practice. However, in the last decade, signs of stagnation and even some degree of deceleration in few crops have become visible and calls for immediate attention. Further, growth in agriculture requires larger investment enabling better use of all resources. But, the fact is that, the rate of investment in agriculture has declined in the recent years and this would probably indicate the recent stagnation in Indian agriculture.

With the breakthrough in farm technology, agriculture has become increasingly capital intensive and this cannot be met out of the farmers own savings and have to depend on credit. In the beginning, private money lenders dominated and their domination was reduced with the introduction of co-operative credit societies in the beginning of nineteenth century. But the co-operatives inspite of their progress, were criticised by many experts in their reports mainly owing to certain deficiencies.

In view of the limitations of co-operatives, the Government encouraged commercial banks to provide more and more credit facilities to agriculture and other priority sectors through nationalising Reserve Bank of India in 1949 followed by the then Imperial Bank of India. The collective nationalisation of 14 major commercial banks was regarded as a wastershed in this direction. But the commercial banks too had their weaknesses.

In view of their limitations, the co-operatives as well as commercial banks, within the frame work of their setup, cannot be expected to meet the growing credit needs of the rural households. The situation was still aggravated due to the implementation of Debt redemption legislation for small farmers and agricultural labours, which has lead to drying up of non-institutional sources of credit. And this gap was expected to be filled up by the institutional sources.

The Government of India also felt the necessity of establishing new class of institution to bridge the gap and appointed a committee under the chairmanship of Shri. Narasimhan, then additional secretary in the banking department, to examine in depth the setting up new class of institution and the committee recommended for the establishment of Regional Rural Banks, which were regionally based, rural oriented and Government sponsored which combine the familiarity of co-operatives and business accumanship of commercial banks.

These banks were expected to provide credit facilities only to target groups so as to achieve social justice in the distribution of credit. many studies have documented the performance of these banks in achieving their set objectives. But these have been criticized in respect of their coverage, concept and viability. The recent reports relating to Financial Sector Reforms submitted by Khusro and Narasimhan throw light on viability and profitability aspects of RRBs and suggested for the merger or closer of these banks. But the Government decided to restructure these banks to make them viable and identified 49 banks in the country including Malaprabha Grameena Bank. Keeping in view the above divergent views, the present study has been taken up with the overall objective of evaluating the achievement of Malaprabha Grameena Bank vis-a-vis its stated objectives.

Specific objectives of the study.

1. to analyse the growth and performance of Malaprabha Grameena Bank in terms of physical and financial indicators.

2. to assess the credit flow and its impact on income and employment of beneficiaries.

3. to measure the performance of the selected branches of the bank.

4. to workout capital adequacy and break-even volume of business of the bank.

5. to analyse different dimensions of the overdues.

6. to analyse the association between managerial efforts and business performance of the bank during the turn around period.

7. to elicit the opinions of the Directors, officials, other bankers and borrowers about the functioning of the bank.

8. to suggest appropriate policy measures for better performance of the bank.

Special Features of the Study

1. The present study encompasses about twelve physical indicators and nineteen financial indicators which were having influence on the performance of the bank and were identified in consultation with Directors, officials of the bank and subject matter specialists in the field of banking.

2. The recent policy changes have been incorporated in the analysis in the form of capital adequacy, break-even volume analysis to assess the real strength of the bank.

3. A methodology was developed for the first time relating to financial institutions which measures the performance considering multi-dimensional aspects.

4. The performance of the bank was assessed from various angles by collecting the opinion of Directors, officials, other bankers and borrowers.

5. Special techniques like exponential growth functions, principal component analysis, capital adequacy, break-even analysis, scaling techniques, cluster analysis, Kendall's co-efficient, Gini co-efficient and descriminant functions were employed for analysis of the data.

METHODOLOGY

For the present study, Malaprabha Grameena Bank was purposively selected because of the pivotal role played by the bank in the development of Belgaum and Dharwad districts by way of financing target groups for their overall development.

Two talukas viz., Bailhongal and Navalgund were selected, randomly, one each from Belgaum and Dharwad districts representing non-irrigated and irrigated areas. Two branches namely Nesaragi and Khanagaon were selected from Bailhongal taluka and Arekurahatti and Tirlapur from Navalgund taluka as per the guidance of the officials present in interaction session. Fourteen branches were selected at random to measure the branch performance.

Ten beneficiaries each from the category of farmers, agricultural labourers, artisans and businessmen were selected

randomly. In all 160 beneficiaries were selected. Seven directors, 50 officials and 20 important bankers were selected to elicit the opinions. Besides, willful and non-willful defaulters of 40 from each category were selected to know the factors discriminating the two groups.

Data collection

The time series data relating to physical and financial aspects of the Malaprabha Grameena Bank were collected from the annual reports, registers and audit reports for a period of 18 years from 1976 to 1994. The data relating to the year 1994, for the selected 20 variable were collected from the Annual flash reports of the bank to measure the performance of these selected branches.

The primary data were collected on the opinion of Directors, officials and other bankers through questionnaires and from the beneficiaries, through personal interview method about the working of the Malaprabha Grameena Bank.

Analytical tools employed

The statistical tools employed were simple averages, percentages, ratios, co-efficient of variation and compound growth rates. Kendall's coefficient of concordance and Gini coefficient were used to analyse the pattern of credit flow and degree of concentration of credit on various purposes or beneficiaries.

Scaling technique was adopted to measure the branch performance. Capital adequacy and break even analysis were also adopted.

Principal component analysis was adopted to analyse the performance of the bank by identifying the underlying dimensions and importance of the variable in explaining the total variation.

The cluster analysis of variables was adopted to analyse the scores obtained from the two groups of respondents on the working of the bank.

The discriminant function was employed to discriminate between the willful and non-willful defaulters of the bank.

Findings of the study

The important findings of the study are summarized below.

1. **Analysis of physical and financial indicators.** There was a substantial increase in both physical and financial indicators over the years.

2. Financial Ratio Analysis

a. The current ratio was more than two in the establishment, development and overall periods which indicated that the bank had maintained a reasonable level of liquidity.

b. Even though no definite trend was seen in credit-deposit ratio, but in the recent years it has started declining and revolved around 100 per cent.

c. The ratio of liquid assets to total asset was found to be less than unity in all the periods.

d. Acid test ratio was found to be less than unity in all the periods.

e. The Debt-equity ratio was found to be as per the norm of 3:1.

f. Indebtedness ratio was found to be more than three in all the periods.

g. Net worth of the bank in the establishment period was negative, but started increasing in the development period and reached a positive level both in the development and overall periods.

h. The net capital ratio of more than unity in the development period indicated that the assets of the bank were sufficient to cover all its liabilities.

i. The ratio of net profits to total assets was found to be negative in the establishment period and overall period, but it was equal to zero in the development period due to the losses incurred outweighing the meagre profits.

j. The ratio of net profits to net worth was fond to be negative in all the three periods, which indicated the service moto of the bank in which profitability aspect was relegated to second position.

k. The ratio of net profits to fixed assets was found to be negative in all the three periods, due to higher level of losses compared to meagre profits earned.

l. The gross ratio was found to be more than 100 per cent in the establishment period, but in the development period the ratio was found to be less than 100 per cent which indicated the realisation of the importance of cost effectiveness by the bank.

m. The operating ratio indicated a satisfactory operational efficiency of the bank.

n. The increase in spread was more than the burden in the recent years which has resulted into profits.

o. The profitability ratio was found to be negative in all the periods.

p. The interest income ratio was higher than interest expenditure ratio in all the years.

q. Non-interest expenditure ratio was higher than the non-interest income ratio in all the years.

3. Growth Rate Analysis

The compound growth rates in respect of physical indicators ; number of branches, manpower, family coverage, villages covered, deposit accounts, advance accounts, deposit and advance accounts per branch and deposit accounts per employee had increased over the years and found highly significant in the overall period. Whereas, number of branches, villages covered, manpower and advance accounts were found to be significant in the establishment period. Number of branches, family coverage, manpower, manpower per branch, deposit and advance accounts, deposit and advance accounts per branch and advance accounts per employee were found to be significant in the development period.

Among the 19 financial variables, the variables profit or loss, credit deposit ratio and recovery per cent registered a negative growth, but the former was found to be non-significant. Remaining 16 variables had registered a positive growth.

4. Pattern of Flow of Credit and Deposit Mobilisation

Among the purposes, the crop loan had a higher share both in number of accounts as well as amount.

Among the borrowers, the small farmer category dominated both in terms of accounts and amount.

The Kendall's co-efficient of concordance worked out for purposewise and beneficiarywise indicated no significant change in the pattern of flow of credit.

Year to year variation was observed both in accounts and amount for various purposes and beneficiaries. Gini co-efficient values indicated that the bank has not concentrated on a particular purpose or beneficiary.

During the recent years, there was a shift in the deposit mix which was towards low cost deposits, bearing lower interest.

5. Measurement of Branch Performance, Capital Adequacy and Break-even volume of Business

Scaling technique was effectively employed to classify randomly selected 14 branches into good (6), satisfactory (4) and poor (4) performance category based on percentile score of identified 20 variables.

The means of good performance branches for the selected variables were higher.

The results of the 't' test indicated a significant difference between good and poor performance category branches in respect of both physical and financial variables.

Capital adequacy analysis indicated that the bank has been operating above the norm of capital adequacy prescribed by the Reserve Bank of India.

Break-even analysis indicated that the bank has been in break-even from the year 1993-94. It has to reach a business level of Rs.238.73 crores and Rs.365.66 crores for the year 1994-95 and 1998-99, respectively to be in break-even.

6. Principal Component Analysis

The principal component analysis of the physical performance indicators of the bank revealed that the first two components accounted for 68.90 per cent of the total variation of which 54.20 per cent was explained by the first component.

The financial performance indicators revealed that the first two components accounted for 80.50 per cent of the total variation in which the contribution of the first component was 55.30 per cent.

A pooled analysis of physical and financial variables were subjected to principal component analysis, in which the first two components accounted for 71.90 per cent of the variation, of which 42 per cent was the contribution of first component.

When the analysis was made separately for physical and financial variables, in the first component which has the major influence captured six physical variables and eleven financial variables. Whereas, in the pooled analysis, four physical variables and ten financial variables were found to be the most important in influencing the performance of the bank.

7. Overdues of the Bank

The percentage of total overdues to demand of the bank tended to decline in the recent years.

Agewise overdues indicated that in the recent year, the overdues upto one year have increased and on the contrary other overdues declined.

Sectorwise overdues analysis indicated that both agricultural and non-agricultural overdues declined in the recent years.

Activitywise overdues indicated a decline in the overdues to the extent of 2.25 per cent.

Among the variables, education and income levels were the two important characteristics which explained the major proportion of the variation in discriminating the willful and non-willful defaulters.

Education and family size were found to be significantly differentiating the willful and non-willful defaulters.

The discriminent function employed was able to classify the willful and non-willful defaulters efficiently as evident from the lower level of misclassification (12.50%).

8. Managerial Efforts and Business Performance

The managerial efforts in terms of imparting recent banking knowhow, knowledge and strategy helped to improve the business performance of the bank by way of increased deposits, advances, business, recovery and profitability.

9. Credit share of Malaprabha Grameena Bank

The overall share of the Malaprabha Grameena Bank in the credit allotment was 13 per cent whereas as, its share was 18 per cent in achievement.

The percentage achievement of the target by the bank was 109 per cent; compared to 80 per cent by commercial banks and 67 per cent by Co-operatives. The bank finance had a favourable impact on income and employment of all categories of borrowers.

The increase in income was more in good performance branch areas compared to lower performance branch area.

In absolute terms, the increase in income was more in the case of farmers and businessmen whereas in relative terms, it was more in the case of agricultural labourers and artisans.

Farmers in irrigated area and businessmen in dry area generated more employment.

10. Cluster Analysis

In the case of opinions expressed by the policy makers, the high aggregate cluster captured 13 variables out of 20 variables. The variables, education and experience, adequacy of staff, services provided to borrowers, impact of credit and supervision etc had higher similarity values indicating a greater influence of these variables on the performance of the bank. It also highlighted the financial and miscellaneous problems relating to the bank.

The medium aggregate cluster emphasised the satisfactory level, relating to performance indicators, viz. bank management, co-ordination among banks and awareness to Government policies.

The low aggregate cluster highlighted the variables viz. decisions at the head office, education levels of the employees and effectiveness of training which needed little more attention.

The working of the Malaprabha Grameena Bank as opined by its officials indicated a good managerial capacity of the officials, supervision, co-ordination within the bank, impact indicators, which has lead to good impact of the bank. The officials encountered problems relating to financial, miscellaneous and involvement of personnel at different levels in the bank.

They also expressed a satisfactory opinion about management of the bank, tackling general problems amicably, training opportunities and the communication within the bank. They also opined that education levels of the employees, the style of functioning of the board, performance indicators, execution of plans and policies as well as communication among banks were the areas deserve attention for improvement.

11. Opinion of other Bankers on the Performance of Malaprabha Grameena Bank

Other bankers operating in the area of operation of the Malaprabha Grameena Bank expressed good opinion about performance of Malaprabha Grameena Bank in respect of Deposit mobilisation, participation in Government programmes and participation in district credit plans and the achievements of the bank.

The bankers expressed a satisfactory opinion with respect to branch expansion, advances to borrowers, customer service and profitability aspects of Malaprabha Grameena Bank.

The opinions regarding the policy matters, it was seen that majority of the respondents favoured for separation of MGB from sponsor bank, opening of NRI accounts and taking up of export financing and increase of non funded business. In respect of non-target group lending it was favoured and opposed by the respondents in equal proportion.

In the case of policy change for empowering Malaprabha Grameena Bank to float shares/debentures to widen its capital base was turned down by majority of the respondents.

12. Opinions of Borrowers

Majority of the borrowers opined that the loan amount was inadequate followed by cumbersome procedure and were not provided with technical guidance.

The major proportion of the borrowers expressed their satisfaction about the services provided by the bank. The reasons for preferring MGB for borrowing from the viewpoint of borrowers were, easy accessibility, due to locational advantage, cheap cost of credit, exploitation by money lenders, timely availability of credit and neglect by other institutions.

POLICY IMPLICATIONS

The following policy implications have been evolved by the researcher based on the findings of the study and his

own observations during the tenure of the study for improving the performance of the Malaprabha Grameena Bank.

1. Organisational

a. Planning, implementation and evaluation

The planning, implementation and evaluation of the programmes could be taken up on top priority by the bank as this is the major step towards the success of the bank.

It would be appropriate on the part of Malaprabha Grameena Bank to entrust evaluation studies to autonomous research institutions from time to time relating to schemes branches, overdues and for the bank to know the weaknesses which would help in improving the operational efficiency.

Some branches which were non-viable due to lack of business potential may be shifted to other areas.

b. Co-operation and Co-ordination

There is a need to strengthen the area of close co-ordination between Malaprabha Grameena Bank and Agricultural Universities, state Department of Agriculture, other financial institutions and extension agencies in organising extension activities to diffuse the technical knowhow among the borrowers and in follow-up activities.

It is also necessary to establish an effective link between credit, marketing and other services so that the beneficiaries belonging to the weaker sections are able to obtain a package of economic services from the bank which could be of direct benefit to the borrower members and also help the bank in recovery of loans.

2. Human Resource Development

a. Education and Training

Extensive training should be given to the policy makers and officials about financial sector reforms in general and RRBs in particular. Educational trips have to be arranged to different financial institutions functioning efficiently both in India and Abroad.

Similarly educational programmes should be conducted for the benefit of borrowers about proper use of credit, repayment and benefits, etc. of the institution.

b. Technical Knowhow

Professional graduates belonging to different discipline should be appointed and a team of experts should be made available at each Area office to provide technical guidance in that area to venture into new activities and assist them at every stage.

3. **Procedural**

a. To avoid cumbersome and time consuming loan procedure, the concerned bank branches should get the documents from the concerned department instead of asking the borrower to get the same.

b. The details of different types of credit facilities, unit costs, eligibility norms, repayment period, rate of interest, etc are to be provided to potential borrowers on a printed paper to avoid redtapism and help the borrower to take appropriate decisions to choose between the institution and the schemes.

c. The present credit limit given to branch managers needs an upward revision to avoid sending of papers to head office which consume lot of time as per the borrowers.

4. **Deposits and Advances**

a. The bank staff has to put in the efforts to maintain the tempo of deposit mobilisation and see that the proportion of low cost deposits would be higher in the total deposits.

b. There is a need to minimise the variations in the flow of credit to different purposes and beneficiaries, eventhough there was no change in the pattern of flow of credit.

c. It was observed that there was some discrepancy in the non-interest cost on advances between MGB and Commercial banks, and these should be set right in consultation with other banks.

d. There is a need to revise the scale of finance and unit cost of different projects to provide adequate credit to borrowers.

e. Soft loans may be extended to those borrowers who had a good reputation in the past for more than five years.

f. The credit-deposit ratio around 100 per cent would be a better ratio for earning profits as evident in the present study.

5. Supervision and Follow-up

a. The loan supervision by the branches of MGB was mostly inspired by the consideration of loan recovery. The emphasis should be given to productive use of credit advanced. The bank has to provide technical guidance for effective utilisation of credit so as to enhance repayment capacity and improve the recovery.

b. As most of the borrowers in rural areas are illiterates and there would be always scope for diversion of funds for consumption or unproductive purposes. In some commercial banks provision is being made to provide educational, medical, and other loans to borrowers to avoid diversion of funds. The denial of adequate credit for consumption

purposes invariably compels the poor borrowers to be under the clutches of money lenders, thus nullifying all attempts at doing away with them. Therefore, the case for extending consumption loans may be examined since moneylenders are still doing roaring business in the village.

6. Recovery

a. The schemes like loan waiver and writing of interest on loans needs rethinking, in view of the increasing overdues and willful defaulters anticipating the benefits of such schemes.

b. Incentives should be given to both officials and borrowers based on the recovery made and prompt repayment records respectively. This would induce an element of identity both on the official front and borrowers front, thus could lead to imitation by others.

c. The problem related to overdues primarily stems from the improper identification of the beneficiaries for providing financial assistance under Government sponsored programmers. There is a need to take into account the technical feasibility and economic viability of the projects.

d. The educated farmers are becoming willful defaulters and they should be convinced properly about longrun implications of willful default.

7. Credit share

a. The credit share of the Malaprabha Grameena Bank has been revolving around 13 per cent in the District credit plan and this should be increased further by allotting more limit in view of the higher percentage of achievement of the targets by the MGB compared to other commercial banks and Co-operative banks.

b. The bank has to encourage more and more group loans in the form of self help groups in its area of operation to cover the borrowers which were uncovered under the banking orbit at a lower cost.

8. Income, Expenditure and Profitability

a. The bank has to make all out efforts to maintain the tempo of higher spread ratio compared to burden ratio, by reducing the interest expenditure, other expenses and increasing the non-interest income.

b. Due to the 'turn around' strategy, the bank has been able to recover from losses and earn a reasonable amount of profit in the recent years. The policies adopted earlier would have the effects in a time-lag fashion, hence, a longrun strategy for continuation of strategies has to be developed.

c. Out of 18 years considered for the study, the bank has earned profits in 12 years and incurred losses in six years,

but these losses outweighed the profits. Thus earning profit in few years without stability may lead to lower profitability or even loses. Thus longrun plan should be made to maintain stability in income, expenditure and profitability.

d. A higher rate of interest is to be offered by the sponsor bank on the balances maintained by the Malaprabha Grameena Bank.

e. The bank should be permitted to open NRI accounts to improve its resource base and earn profit margin by way of handling the transactions of these accounts and earn commission and other charges.

f. The bank should be encouraged to finance the agri-export units at the village level so that the benefits of foreign markets would trickle down to ruralites.

g. The shares of the bank may partly be issued to participating banks, employees and public so that the employees would be induced to work more efficiently to earn profit for the bank to appreciate their share value in the market to get more returns for their investment.

h. The bank need little more concessions in the interest charged from the sponsor bank, NABARD and RBI to reduce their expenditure side.

i. Emphasis should be laid on per branch deposits, advances and profits.

j. As far as possible the non-performing assets of the bank should be kept at a minimum level.

9. Infrastructure Development

Availability of adequate infrastructure is a prerequisite for socio-economic development. As it was observed by the researcher, two branches out of the four selected were not having good roads, transport facility and drinking water. This infrastructure includes development of roads, postal and telecommunication facilities, supply of electric power, public health services, including supply of drinking water, education facilities and security measures and the like. These are essentially provided by both state and central Governments.

As revealed by the findings of the study, the Malaprabha Grameena Bank has been performing well in the areas of growth in physical and financial indicators, attained break-even level business and functioning above the capital adequacy norm. Further, the Directors, officials, other bankers and borrowers expressed their favourable opinion and appreciation about the functioning of the bank. Keeping in view,the above quantitative and qualitative aspects, the Malaprabha Grameena Bank could be continued to function with the present setup coupled with further strengthening of this institution to serve in a better way.

CHAPTER - VII

REFERENCES

VII. REFERENCES

ABDUL, N. AND JYOTHI, M., 1990, Funds Management in Regional Rural Banks. Yojana, 34 (18) : 16-17.

ANAND, S.C., 1981, The Ratio Analysis Aspects of a State Co-operative Consumer Federation Indian Co-operative Review 18 : 253-267.

ANAND, G.S., 1984, Performance Appraisal of the Bangalore Grape Growers Marketing and Procesing Co-operative Society Ltd., Lalbagh, Bangalore Karnataka. A Case Study. M.Sc (Agri.) Thesis (Unpub), UAS, Bangalore.

ANONYMOUS, Annual Reports of Malaprabha Grameen Bank, 1976-1994.

ANONYMOUS, 1974, Credit Requirement of Agriculture, National Council of Applied Economic Research, New Delhi.

ANONYMOUS, 1981, Report of the Committee to Review Arrangements For Institutional Credit for Agriculture and Rural Development (CRAFICARD). Bombay

ARUNA RAO, K. AND BHAT, RAMACHANDRA., 1985, An Evaluation of the Distribution of Rural Credit by the Primary Agricultural Credit Co-operative Societies in Karnataka. Indian Co-operative Review, 22 (4):433-442.

ARUNA RAO, K, BHAT, A.R.S. AND BHAT, RAMACHANDRA, 1991, A Methodology to Measure the Efficiency of Business Organisations. Indian Co-operative Review, 28 (3) : 237-244.

ATIBUDHI, H.N. AND SINGH, J.P., 1994, Flow of Credit to Different Categories of Farmers : A study in Cuttack District, Orissa. Indian Journal of Agricultural Economics, 49 (3) : 512.

BALISHTER, A.K, SINGH YATENDRA AND SINGH MALKHAN, 1990, Role of Regional Rural Banks in Upliftment of Weaker-Section - A study in Agra District of U.P. Agricultural Situation in India, 45 (5) : 345-350.

BALISHTER, A.K, SINGH AND SHIV KUMAR., 1991, Overdues of Loans in Agriculture - A study. Agricultural Banker, 14 (1) : 13-16.

BEDI SURESH, 1988, Economic viability of Regional Rural Banks : A case study of Haryana. Indian Journal of Agricultural Economics, 43 (3) : 421.

BHALE RAO, M.M., MALATI AND SINGH RAVINDRA., 1988, Regional Inequalities in Long-term Institutional Credit - A study of Land Development Banks. Indian Journal of Agricultural Economics, 43 (3) : 432.

BHASKAR UDAY, TALLAPRAGADA RAO, V.S AND KUMAR., 1991, Functioning of RRBs : An overview. Kurukshetra, 39 (10) : 16-18.

BHATTACHARYA PUSPITARANJAN, 1994, Problems and Prospects of Regional Rural Banks - A case study of Mayurakshi Grameena Bank, West Bengal. Agricultural Banker, 17 (1) : 28-34.

BHAVANI DEVI, I. AND SITARAMAN, S., 1985, Analysis of Factors Influencing Repayment Capacity. Agricultural Banker, 8 (4) : 11-13.

BHOSALE, S.R. AND DANGAT, S.B., 1988, A study into the Overdues of Co-operative Loans in Maharashtra. Indian Journal of Agricultural Economics, 43 (3) : 420.

CHATTAPADHAYA, 1965, Agricultural Capital Formation and Its Relatin to Credit Facilities in India. Indian Journal of Agricultural Economics, 20 (1) :188-192.

* COBIA AND FARRIS, P.L., 1969, Mergers and Diversified Growth of Large Grain Firms. American Journal of Agricultural Economics, 51 : 619-623.

DADICH, C.L., 1994, An Analysis of Impact of Institutional Credit for Agriculture on Income Distribution in India and Emerging Scenario in the context of Financial Sector Reforms. Indian Journal of Agricultural Economics, 49 (3) : 520-521.

DATTA, T.N., 1988, Analysis of Default in Organised Sector Credit - A study of Minor Irrigation Scheme in West Bengal. Indian Journal of Agricultural Economics, 43 (3) : 428.

DEVENDRA BABU, 1988, Regional Rural Bank Need Structural Change Kurukshetra, 37 (3) : 4-7.

DHARMPALAN, C., 1992, Personal Contact is Better than Legal Action. National Bank News Review, 8 (7) : 16-17.

DHARMA RAO, G., 1991, Impact of Grameena Bank Finance on Non-farm Sector : An Empirical Study. Financing Agriculture, 23 (1) : 28-33.

DIXIT, R.S., CHAKRABORTY, T. AND DUBEY, P.P., 1994, Impact of RRB Finance on Income and Employment of Weaker Sections in Varnasi District. Agricultural Banker, 18 (3) : 11-18.

DONGRE YASHVANTHA, 1986, For Rural Growth. Yojana, 29 (24) : 11-13.

DUHAN, T.C. AND SINGH, C.B., 1988, Institutional Credit for Dairying in Haryana State. Indian Journal of Agricultural Economics, 43 (3) 425.

EUGENE, M. AND LERNER., 1971, Managerial Finance. Harcourt Brace Jovanoveih,Inc., New York : 43-67.

FOULKE, R.A., 1945, Practical Financial Statements Analysis. McGrew Hill Publishing Company Ltd., New Delhi.

GADGIL, M.V, 1986, Agricultural Credit in India : A Review of Performance and Policies, Indian Journal of Agricultural Economics, 41 (3) : 281-286.

GARG, J.S. SING, G.N AND TRIPATHI, R.S., 1978, An Analysis of Agricultural Fiancing by Regional Rural Banks in Districts of Mordabad, Uttar Pradesh. Indian Journal of Agricultural Economics. 33 : 147.

HANUMANTHA RAO, C.H., 1989, Technological Change in Indian Agriculture : Emerging Trends and Perspectives. Indian Journal of Agricultural Economics. 44 (4) : 385-398.

HARI KUMAR, S., 1991, Utilisation and Repayment of Agricultural Loans of Regional Rural Banks : A case study. Agricultural Banker, 15 (3) : 13-17.

HAQUE, T. AND VERMA SUNITA, 1988, Regional and Class Disparities in the Flow of Agricultural Credit in India. Indian Journal of Agricultural Economics, 43 (3) : 356-363.

JAGADEESHA, D.M., SHANKARA MURTHY, H.G., SADATH ALI KHAN, H.S. AND ARUNA RAO, K., 1990, Performance of Tungabhadra Grameena Bank (RRB) in Karnataka - An Economic Analysis. Agricultural Banker, 13 (3) : 35-41.

JAGATRAM., 1990, RRB's Help Rejuvenate Rural Economy. Kurukshetra, 38 (10) : 4-8.

JAIN, R.B., 1992, Initial Costs Must be Low, The Hindu Survey of Indian Agriculture, 129-132.

JOHN WINFRED, A., 1985, Operational Growth of Land Development Banks - An analysis. Land Bank Journal, 23 (3) : 21-30.

JOSHI MOVICHAND., 1982, RRBs An Analytical Study Agricultural Banker, 5 : 5-8.

KADIAN, R.S AND KAUSHIK, C.R., 1993, An Impact Study of Institutional Finance under IRDP in Kurukshetra District of Haryana. Agricultural Banker, 16 (2) : 23-30.

KALYANKAR, S.P. AND RAJMANE, K.D., 1987, Discriminant Function Analysis in the Loans of Co-operatives. Indian Co-operative Review, 25 (1) : 38-42.

KHATKAR, R.K., HASIJA, R.C. AND KUMAR PRADEEP., 1994, Trend of Agricultural Credit and Overdues in Haryana, Agricultural Banker, 18(2) : 27-28.

KHUSRO, A.M., 1992, A Review of the Agricultural Credit System in India : Report of the Agricultural credit Review Committee. Indian Journal of Agricultural Economics, 47 (2) : 274-293.

KRISHNAN, C., 1990, Regional Rural Banks and Rural Development, Yojana, 33 (24) : 32-34.

KRISHNAN, C AND BALAKRISHNAN, E.P., 1989, Role of Regional Rural Banks in Dairy Financing - A case study. Agricultural Banker, 12 (2) : 39-42.

KRISHNA RAO., 1963, A Financial Evaluation of Co-operatives in Madras State. Indian Co-operative Review, 24(2):12-24.

KUCHHADIYA, D.B. AND SHIYANI, R.L., 1988, A Retrospection in Overdues of Regional Rural Banks, Agricultural Banker, 11 (4) : 5-8.

KUCHHADIYA, D.B AND SHIYANI, R.L., 1989, Role of Regional Rural Baks in Upliftment of Weaker Sections. Agricultural Banker, 12 (3) : 7-10.

KURULKAR, R.P. AND DEOGIRIKAR, A.B., 1980, Regional Rural Banks and the Weaker Sections (with special reference to the Marathwada Grameena Bank). Indian Journal of Agricultural Economics, 35 (4) : 97.

LAKSHMINARAYANA, V., 1984, Regional Rural Banks - Problems and Prospects : A case study. Financing Agriculture, 16 (2) : 54-56.

LAWRENCE D. SCHALL AND CHARLES, W. HALEY., 1977, Introduction to Financial Management, McGraw Hill Book Company, New York, 407-422.

MEHTA SURESH., 1984, Jhabua Dhar Kshetriya Grameen Bank : An Experience. Financing Agriculture, 16 (2) : 51-53.

MOHANARAO, L.K., 1980, Impact of Programmes on Target Groups-Case Study of a Regional Rural Bank. Indian Journal of Agricultural Economics, 35 (4) : 73-77.

MOHSIN, M., 1977, Financial Planning and Control, Vikas Publishing House, New Delhi.

NAIDU, M.C. AND NAIDU RAJENDRA, R., 1988, Impact of Credit on Income and Employment - Case Study of a Regional Rural Bank, Agricultural Banker, 11 (1) : 24-25.

NARASIMHAN, M., 1992, Report of the Committee on the Financial System. Indian Journal of Agricultural Economics, 47 (2) : 266-273.

NATARAJAN, R., GANSHYAM DASS, O AND KRISHNA REDDY, K., 1980, Working of Consumers Co-operatives in Andhra Pradesh - A Case Study. Indian Co-operative Review, 18 (1):7-20.

NOORBASHA ABDUL AND DAKSHINAMURTHY, D., 1984, RRB's :Effective Instrument of Rural Development. Financing Agriculture, 16 (2) : 43-48.

* PAGE, R.E., SCHEMER HORN, R.W. AND ROMINE, B.D., 1970, Financial Analysis of Grain Supply Co-operatives in Oklohoma, Co-operative Extension Service, Oklohoma State University, Oklohoma, U.S.A.

PANDEY, V.K. AND MURALIDHARAN, M.A., 1977, An Application of Discriminant Function in Agricultural Finance. Indian Journal of Agricultural Economics, 32 (2) : 41-51.

PARMAR, G.D., SHIYANI, R.L. AND KUCHHADIYA, D.B., 1988, Performance of Banaskantha Mehsana Grameena Bank in Gujarat State. Agricultural Banker, 11 (3) : 24.

PATAVARDHAN, V.S., 1978, Trends in Corporate Financing in India. Artha Vignana, 20 (1) : 1-30.

PATNAIK UMAMAHESH, K. AND SUDARA RAO, M., 1989, Impact of SVGB on Beneficiary Households. Agricultural Banker, 11 (4) : 22-24.

RAGHAVAN, B.S., 1992, Agribusiness : Key to Unlock Rural Eldorado. The Hindu Survey of Indian Agriculture, 11-16.

RAGHURAM, P. AND BHAVANIDEVI, I., 1988, An Analysis of Tangible Means to Reduce Incidence of Default in Commercial Bank Lendings. Indian Journal of Agricultural Economics, 43 (3) : 422.

RAMESH, B. AND THAKUR, D.N., 1984, Management of RRBs Resources-Fund Management : A key to viability. Financing Agriculture, 16 (2) : 40-42.

RAMOLA, K.S. AND NEGI, K.S., 1991, Regional Rural Banks and Rural Development - A case study. Yojana, 35 (12) : 23-25.

RANGARAJAN, C., 1994, Role of Non-Bank Financial Companies, Yojana, 38 (12) : 26-28.

RAO RAM MOHAN, T.V.S AND DUA ARUN, K., 1977, Ratio Analysis in Firm Level Working Capital Decision. Southern Economist, 15 : 15-18.

REDDY BABU, D.R., CHENGAPPA, P.G AND LALITH ACHOTH., 1994, Multivariate Techniques in Ranking Performance : An Application to the Working of PCARDBs in Karnataka. Agricultural Economics Research Review, 7 (1): 38-46.

REDDY INDRASENA., 1994, Financial Performance of Co-operative Banks - A case Study. Agricultural Banker, 18 (2) : 17-26.

REDDY INDRASENA., 1994, Co-operative Banks for Agriculture and Rural Development - A Case Study. Agricultural Banker, 18 (3) : 1-7.

REDDY RAMAKRISHNA, G. AND REDDY RAMA SUBBA., 1986, But How to Make it Effective, Yojana, 29 (24) : 14-15.

REED, E.W., 1964, Commercial Bank Management, Harper and Row Publishers Inc New York.

SAHAYA, R. AND MUNINATH SHARMA., 1986, Functioning of the Regional Rural Banks of India. Agricultural Banker, 9 (2) : 14-18.

SANGWAN, S.S., 1989, Viability of Rural Credit Structure : A Case Study of RRB's. Prajnan, 18 (2) : 213-223.

SANKARAIAH AND REDDY BHAGAVAN, B., 1994, Recovery Performance of Rayalseema Grameena Bank. Agricultural Banker, 18 (4) : 38-48.

SARUP AND PANDEY, R.K., 1982, Socio-Economic Characteristics Affecting Fertilizer Use in Orissa. Artha Vikas, 18 : (1&2) : 52-57.

SATYANARAYANA, K., 1994, Capital Adequacy Gaps for Banks - Problems and Prospects. Economic and Political weekly, 29 (9) : 37-42.

SATYASUNDARAM, I., 1984, Strengthening Regional Rural Banks. Financing Agriculture, 16 (2) : 22-24.

SAVARAIAH, G. AND NIRMALAMANI, N., 1988, Rural Banking for the Rural Milieu. Indian Co-operative Review, 26 (2) : 204-213.

SHANKARAMURTHY, H.G., 1986, Performance of the Karnataka State Co-operative Marketing Federation Ltd., and Its Impact on Farm Market- An Economic Anaysis, Ph.D Thesis (unpub.), Andhra Pradesh Agricultural University, Hyderabad.

SHETE, N.B. AND KARKAL, G.L., 1989, Regional Rural Banks : Problems and Perspectives of Rural Credit. Prajnan, 18 (2) : 133-160.

SHIYANI, R.L. AND PATEL, J.K., 1994, An Evaluation of Physical and Fiancial Indicators of Banaskantha Mehsana Grameen Bank (Gujarat), Indian Journal of Agricultural Economics, 49 (3) : 506.

SINGH, G.N., GARG, J.S. AND VERMA, A.R., 1978, A Critical Review of Rural Credit by Financial Institutions in Kannauj Block District Farrukhabad (A case study). Indian Journal of Agricultural Economics, 33 (4) : 148.

SINGHA KANHAIYA., 1990, Restructuring Regional Rural Banks, Kurukshetra, 38 (10) : 9-11.

SINGH, G.N, KUSHWAHA, R.K.S. AND SINGH, R.B., 1994, Agricultural Finance in the Context of Technology - Led Agricultural Development. Indian Journal of Agricultural Economics, 49 (3) : 508.

SINGH, R.K. AND UPADHYAY, K.M., 1984, A study of Loan Recovery of RRBs in Bihar Financing Agriculture, 16 (2): 37-39.

SINGH, R.P., 1988, Disbursement, Overdues and Factors Affecting Repayment Capacity of Borrowers, Indian Journal of Agricultural Economics, 43 (3) : 433.

SINGH RAJENDRA AND JAIN, V.K., 1985, Rural Banking and It's Challenges. Yojana, 29 (13) : 6-8.

SINGH, S.P., BALISHTER AND JAIN, A.K., 1988, A Study of Overdues of Loans in Agriculture in Agra District of Uttar Pradesh. Indian Journal of Agril. Economics, 43 (3) : 423.

SINGH, S.P AND BALISHTER., 1989, Overdues of Loans in Agriculture - A study in Agra District of U.P. Agricultural Banker, 12 (3) : 38-44.

SINHA S.S., 1991, Funds Management in Regional Rural Banks. National Bank News Review, 7 (8) : 23-27.

SINHA, SHEILA, SINGH, R.K.P. AND CHOUDHARY, J.N., 1994, Financial Viability of Central Co-operative and Regional Rural Banks in Bihar - A Case Study, Indian Journal of Agricultural Economics, 49 (3) : 515-516.

SRIDHARAN, K., 1975, An Analysis of Business Performance and Growth of a Service Co-operative : A Case Study of Society of Tadiyalur Co-operative Agricultural Services Limited, Tadiyalur, Coimbatore district, Tamil Nadu. M.Sc (Agri.), Thesis (unpub.) University of Agricultural Sciences, Bangalore.

SRIVASTAVA, S.C. AND SUBRAMANIAN, B., 1982, Regional Rural Bank Operation : An Evaluation. Estern Economist, 78 (9) : 582-585.

SUDHAKAR, H.R., VENKATARAM, J.V. AND NAGARAJ, G.N., 1984, An Evaluation of Performance of Regional Rural Bank in Mysore District, Karnataka. Financing Agriculture, 16 (2) : 28-30.

SUKUMARAN, A. AND SHAHEENA, P., 1991, Management of Spread, Burden and Profitability - A case study of Palghat District co-operative Bank, Indian Co-operative Review, 29 (1) : 80-95.

SUNDARA RAO, M. AND PATNAIK UMAMAHESH, K., 1988, Sri Visakha Grameena Bank- An Evaluation. Yojana, 32 (13): 32-34.

VINOD RAO, B.N., 1994, The New Economic Policy and Agricultural Credit. Southern Economist, 33 (5) : 12-14.

WADHVA, C.D., 1980, Working of Regional Rural Banks - Two Case Studies, Rural Banks for Rural Development. The MacMillan Company of India Limited, Delhi : 59-135.

YESHWANTH, INDRA., 1989, South Malbar Grameen Bank in Kerala - Performance Assessment. Agricultural Banker, 12 (3) : 28-34.

---

* Originals not seen.

APPENDICES

Appendix I.

Physical Performance Indicators of Malaprabha Grameena Bank

Years	Manpower (No.)	No. of Branches	Families/ Village (No.)	Villages Covered (No.)	Deposits Accounts (Lakhs)	Advance Accounts (Lakhs)	Employee/ Branch (No.)	Dep. A/c per Br (Lakhs)	Adv A/c. per Br (Lakhs)	Dep A/c per Empl (Lakhs)	Adv A/c per Empl (Lakhs)
1976	26	2	86	5	0.002	0.004	13	0.001	0.002	0.00008	0.00015
1977	102	29	78	140	0.270	0.120	3	0.009	0.004	0.00265	0.00118
1978	182	55	94	340	0.610	0.200	3	0.011	0.004	0.00335	0.00110
1979	324	75	104	652	1.140	0.340	4	0.015	0.005	0.00352	0.00105
1980	333	100	162	708	1.720	0.540	3	0.017	0.005	0.00517	0.00162
1981	506	104	166	1090	2.430	0.810	4	0.023	0.008	0.00480	0.00160
1982	565	126	215	1185	3.140	1.060	4	0.025	0.008	0.00556	0.00188
1983	832	152	267	1265	3.990	1.300	5	0.026	0.009	0.00480	0.00156
1984	948	188	301	1480	4.960	1.610	5	0.026	0.009	0.00523	0.00170
1985	1056	198	351	1500	5.660	1.720	5	0.028	0.009	0.00536	0.00163
1986	1211	198	402	1532	6.300	1.970	6	0.032	0.010	0.00520	0.00163
1987	1353	208	452	1532	6.780	2.000	6	0.033	0.010	0.00501	0.00148
1989	1509	208	518	1540	7.370	2.040	7	0.035	0.010	0.00488	0.00135
1990	1489	208	739	1206	7.760	2.190	7	0.037	0.011	0.00521	0.00147
1991	1489	208	854	1128	7.880	2.070	7	0.038	0.010	0.00529	0.00139
1992	1483	208	926	1128	8.900	2.040	7	0.043	0.010	0.00600	0.00138
1993	1478	208	998	1128	7.840	2.050	7	0.038	0.010	0.00530	0.00139
1994	1499	208	1084	1128	7.730	2.090	7	0.037	0.010	0.00516	0.00139

Appendix II.

Financial Performance Indicators of Malaprabha Grameena Bank

(Rs. in Lakhs)

Years	Advances	Deposit Amount	Tot Business	Income	Total Expenses	Profit /Loss	Overdues	Recovery %	Credit/ Branch	Deposit/ Branch	Business/ Branch	Credit/ Employee	Deposit/ Employee	Refinance Prpn. Govt.	Share Capital	Non Perf. Asset	C-D Ratio %	Borrow-ings
1976	0.87	1.36	2.23	0.42	0.35	0.06	0.00	0.00	0.44	0.68	1.11500	0.03346	0.05	0.00	0.00	25.00	0.00	63.97	0.00
1977	61.34	45.67	107.01	4.66	7.03	-2.37	0.00	0.00	2.12	1.57	3.69000	0.60137	0.45	25.00	0.00	25.00	0.00	134.31	25.00
1978	131.67	116.77	248.44	15.55	22.35	-6.79	0.00	72.94	2.39	2.12	4.51709	0.72346	0.64	85.00	202.78	25.00	0.00	112.76	85.00
1979	306.73	323.63	630.36	35.58	41.41	-5.85	0.00	67.29	4.09	4.32	8.40480	0.94670	1.00	168.50	42.62	25.00	0.00	94.78	168.50
1980	686.01	512.73	1198.74	74.83	77.01	-2.18	0.00	71.60	6.86	5.13	11.98740	2.06009	1.54	244.80	117.73	25.00	0.00	133.80	413.32
1981	1277.66	755.49	2033.15	140.34	132.26	8.08	0.00	72.31	12.29	7.26	19.54952	2.52502	1.49	458.23	132.00	25.00	0.00	169.12	871.55
1982	2044.94	1101.71	3146.65	237.24	218.80	18.45	326.00	67.27	16.23	8.74	24.97341	3.61936	1.95	1393.11	223.89	25.00	0.00	185.62	1393.11
1983	2751.18	1652.45	4403.63	334.94	313.01	21.93	575.15	61.00	18.10	10.87	28.97125	3.30671	1.99	1753.88	243.83	25.00	0.00	166.49	1753.88
1984	4032.96	2567.07	6600.03	444.05	428.84	15.21	764.00	59.33	21.45	13.65	35.10654	4.25418	2.71	2736.99	1174.86	25.00	0.00	157.10	2736.99
1985	5119.78	3476.87	8596.65	598.09	578.54	19.54	967.74	60.20	25.86	17.56	43.41742	4.84828	3.29	779.26	522.99	25.00	0.00	147.25	3148.27
1986	6595.44	3965.16	10560.60	760.00	741.00	18.99	1616.13	53.23	33.31	20.03	53.33636	5.44628	3.27	1027.33	773.28	25.00	0.00	166.33	4022.25
1987	7760.87	4459.84	12220.71	917.80	912.42	5.57	2553.74	48.30	37.31	21.44	58.75341	5.73605	3.30	4646.23	546.95	25.00	247.11	174.02	4646.23
1989	8831.75	5532.11	14363.86	1300.28	1298.82	1.14	4387.84	40.03	42.46	26.60	69.05702	5.85272	3.67	5329.47	575.84	25.00	1061.97	159.65	5329.47
1990	10307.38	6717.48	17024.86	1257.98	1250.71	7.27	6300.75	28.49	49.55	32.30	81.85029	6.92235	4.51	5879.74	358.88	50.00	748.96	153.44	5879.74
1991	8767.05	7395.41	16162.46	1537.70	1419.92	15.71	4847.45	54.41	42.15	35.55	77.70413	5.88788	4.97	5805.44	293.48	50.00	554.70	118.55	5805.43
1992	10033.00	9523.05	19556.05	1511.39	1685.08	-174.91	5560.13	42.49	48.24	45.78	94.01947	6.76534	6.42	5282.28	273.70	50.00	1853.92	105.35	5682.28
1993	11696.01	10920.52	22616.53	1801.26	2123.27	-324.56	6098.13	45.30	56.23	52.50	108.73332	7.91340	7.39	6459.45	362.64	75.00	1701.90	107.10	6459.85
1994	15271.52	14554.52	29826.04	2506.53	2486.03	10.87	6716.26	47.00	73.42	69.97	143.39442	10.18781	9.71	7950.12	442.79	75.00	2179.15	104.93	7996.91

Appendix III.

Liquidity and Solvency Ratios of Malaprabha Grameena Bank

Years	Liquidity Ratios				Tests of Solvency	
	Current Ratio	C-D Ratio	Liq. Asst.to Tot. Asst.	Acid Test Ratio	Debt-equity Ratio	Indebtedness Ratio
1976	3.682	63.971	0.365	1.615	0.000	0.000
1977	3.283	134.311	0.713	0.902	0.599	6.429
1978	2.215	112.760	0.337	0.838	2.035	4.486
1979	2.624	94.778	0.365	1.034	4.044	5.199
1980	2.045	133.796	0.249	0.546	9.920	3.882
1981	4.433	169.117	0.217	1.003	20.917	3.159
1982	4.038	185.615	0.184	0.760	26.937	3.069
1983	4.277	166.491	0.194	0.851	19.866	3.352
1984	4.266	157.104	0.230	1.009	24.083	3.336
1985	4.696	147.253	0.232	1.112	21.532	3.651
1986	3.797	166.335	0.086	0.372	20.855	3.461
1987	3.651	174.017	0.060	0.250	22.984	3.426
1989	3.238	159.645	0.046	0.185	26.118	3.483
1990	3.444	153.441	0.052	0.218	24.215	3.686
1991	1.306	118.547	0.059	0.263	11.184	3.974
1992	1.354	105.355	0.078	0.384	24.972	4.591
1993	1.260	107.101	0.072	0.351	51.651	4.601
1994	1.227	104.926	0.067	0.343	63.941	4.820

Appendix IV.

Tests of Strength, Profitability and Efficiency Ratios

	Tests of Strength		Tests of Profitability			Tests of Efficiency	
Years	Net Worth	Net Capital Ratio	Net Profit to Tot Assts	Net Profit To Networth	Net Profit To Fixed Assts.	Gross Ratio	Operating Ratio
1976	-0.860	0.967	0.002	-0.070	0.162	83.333	80.95
1977	-63.700	0.339	-0.072	-0.037	-0.653	150.966	130.79
1978	-9.140	0.960	-0.031	-0.743	-1.007	143.730	95.76
1979	-14.947	0.972	-0.011	-0.391	-0.645	116.386	70.32
1980	-17.110	0.982	-0.002	-0.127	-0.164	102.913	54.90
1981	17.210	1.010	0.005	0.469	0.595	94.243	44.07
1982	-0.290	1.000	0.007	-63.621	0.947	92.227	38.10
1983	-0.250	1.000	0.006	-87.720	0.843	93.453	37.16
1984	-0.660	1.000	0.003	-23.045	0.439	96.575	38.22
1985	199.080	1.029	0.003	0.098	0.524	96.731	35.30
1986	7.750	1.001	0.002	2.450	0.327	97.500	37.88
1987	4.420	1.000	0.001	1.260	0.094	99.414	39.56
1989	407.190	1.037	0.000	0.003	0.018	99.888	41.24
1990	474.490	1.036	0.001	0.015	0.154	99.422	41.52
1991	498.240	1.036	0.001	0.032	0.347	98.978	39.80
1992	489.980	1.031	-0.011	-0.357	-3.535	111.573	51.28
1993	670.960	1.038	-0.018	-0.484	-6.669	118.019	54.18
1994	722.590	1.031	0.000	0.015	0.071	99.566	43.07

Appendix V.

Spread, Burden and Profit of Malaprabha Grameena Bank from 1976 to 1994

(Amount in lakhs)

Years	Interest Income (R)	Interest Expenditure(K)	Spread S=(R-K)	Manpower Expenses (M)	Other Expenses (O)	Non Int. Expend. N=(M+O)	Non Int. Income (C)	Burden B=(N-C)	Profit P=(S-B)
1976	0.31	0.01	0.30	0.00	0.34	0.34	0.11	0.23	0.07
1977	4.36	0.94	3.42	1.82	4.27	6.09	0.30	5.79	-2.37
1978	14.64	7.46	7.18	8.20	6.69	14.89	0.91	13.98	-6.80
1979	32.73	16.39	16.34	14.70	10.32	25.02	2.85	22.17	-5.83
1980	68.82	35.93	32.89	25.10	15.98	41.08	6.01	35.07	-2.18
1981	133.77	70.41	63.36	41.56	20.29	61.85	6.57	55.28	8.08
1982	231.24	128.41	102.83	60.80	29.59	90.39	6.00	84.39	18.44
1983	328.06	188.53	139.53	88.00	36.48	124.48	6.88	117.60	21.93
1984	435.44	259.12	176.32	120.63	49.09	169.72	8.61	161.11	15.21
1985	587.68	367.40	220.28	160.57	50.57	211.14	10.41	200.73	19.55
1986	737.39	453.07	284.32	219.07	68.86	287.93	22.61	265.32	19.00
1987	884.18	549.38	334.80	278.31	84.73	363.04	33.62	329.42	5.38
1989	1255.41	762.60	492.81	426.95	109.27	536.22	44.67	491.55	1.26
1990	1218.16	728.36	489.80	393.40	128.95	522.35	39.82	482.53	7.27
1991	1490.00	807.87	682.13	486.08	125.97	612.05	47.70	564.35	117.78
1992	1432.41	910.03	522.38	655.11	119.94	775.05	78.98	696.07	-173.69
1993	1675.55	1147.37	528.18	844.16	131.74	975.90	125.71	850.19	-322.01
1994	2318.90	1406.36	912.54	904.51	175.16	1079.67	187.63	892.04	20.50

Appendix VI.

Analysis of Spread, Burden and Profitability Ratios of Malaprabha Grameena Bank

Years	Interest Income Ratio(r)	Interest Expendi--ture Ratio(k)	Spread Ratio s=(r-k)	Manpower Expenses Ratio (m)	Other Expenses Ratio (o)	Non Int. Expend. Ratio n=(m+o)	Non Int. Income Ratio (c)	Burden Ratio b=(n-c)	Profit Ratio p=(s-b)
1976	13.90	0.45	13.45	0.00	15.25	15.25	4.93	10.32	3.13
1977	4.07	0.88	3.19	1.70	3.99	5.69	0.28	5.41	-2.22
1978	5.89	3.00	2.89	3.30	2.69	5.99	0.37	5.62	-2.74
1979	5.19	2.60	2.59	2.33	1.64	3.97	0.45	3.52	-0.93
1980	5.74	3.00	2.74	2.09	1.33	3.42	0.50	2.92	-0.18
1981	6.58	3.46	3.12	2.04	1.00	3.04	0.32	2.72	0.40
1982	7.35	4.08	3.27	1.93	0.94	2.87	0.19	2.68	0.59
1983	7.45	4.28	3.17	2.00	0.83	2.83	0.16	2.67	0.50
1984	6.60	3.93	2.67	1.83	0.74	2.57	0.13	2.44	0.23
1985	6.84	4.27	2.57	1.87	0.59	2.46	0.12	2.34	0.23
1986	6.98	4.29	2.69	2.07	0.65	2.72	0.21	2.51	0.18
1987	7.24	4.50	2.74	2.28	0.69	2.97	0.28	2.71	0.03
1989	8.74	5.31	3.43	2.97	0.76	3.73	0.31	3.42	0.01
1990	7.16	4.28	2.88	2.31	0.76	3.07	0.23	2.84	0.04
1991	9.22	5.00	4.22	3.01	0.78	3.79	0.30	3.49	0.73
1992	7.32	4.65	2.67	3.35	0.61	3.96	0.40	3.56	-0.89
1993	7.41	5.07	2.34	3.73	0.58	4.31	0.56	3.75	-1.41
1994	7.77	4.72	3.05	3.03	0.59	3.62	0.63	2.99	0.06

Appendix VII.

Flow of Credit from Malaprabha Grameena Bank to Different Beneficiaries

Sl. No.	Years/ Category	Marginal farmers	Small farmers	Agril. labourers	Craftsman/ SSI	Small Business/ SRTO
	Accounts in Percent					
1.	1984	6.21	20.64	5.48	2.43	11.37
2.	1985	6.29	26.40	2.80	2.46	14.26
3.	1986	5.88	23.94	7.43	2.19	14.95
4.	1987	6.90	27.39	6.84	2.67	13.54
5.	1989	6.55	24.33	3.89	2.22	10.91
6.	1990	5.51	21.38	3.98	2.16	12.06
7.	1991	3.38	10.20	4.54	2.25	9.84
8.	1992	5.55	22.18	4.27	2.32	9.56
9.	1993	5.92	25.16	3.69	2.17	10.16
10.	1994	6.00	29.71	4.29	2.10	12.95
	Amount in per cent					
1.	1984	7.87	44.80	5.29	2.72	13.84
2.	1985	9.28	50.00	5.13	2.58	16.40
3.	1986	7.58	47.84	6.47	2.73	18.53
4.	1987	8.09	46.64	10.05	2.74	15.30
5.	1989	8.13	45.08	4.10	2.51	13.87
6.	1990	8.69	39.94	3.74	2.56	17.40
7.	1991	4.91	25.72	4.39	2.90	18.37
8.	1992	6.35	37.35	3.61	2.61	15.85
9.	1993	5.51	41.65	2.43	2.27	18.07
10.	1994	5.12	47.70	2.14	1.92	16.62

Appendix VII.

Flow of Credit from Malaprabha Grameena Bank to Different Beneficiaries

Sl. No.	Years/ Category	Marginal farmers	Small farmers	Agril. labourers	Craftsman/ SSI	Small Business/ SRTO
	Accounts in Percent					
1.	1984	6.21	20.64	5.48	2.43	11.37
2.	1985	6.29	26.40	2.80	2.46	14.26
3.	1986	5.88	23.94	7.43	2.19	14.95
4.	1987	6.90	27.39	6.84	2.67	13.54
5.	1989	6.55	24.33	3.89	2.22	10.91
6.	1990	5.51	21.38	3.98	2.16	12.06
7.	1991	3.38	10.20	4.54	2.25	9.84
8.	1992	5.55	22.18	4.27	2.32	9.56
9.	1993	5.92	25.16	3.69	2.17	10.16
10.	1994	6.00	29.71	4.29	2.10	12.95
	Amount in per cent					
1.	1984	7.87	44.80	5.29	2.72	13.84
2.	1985	9.28	50.00	5.13	2.58	16.40
3.	1986	7.58	47.84	6.47	2.73	18.53
4.	1987	8.09	46.64	10.05	2.74	15.30
5.	1989	8.13	45.08	4.10	2.51	13.87
6.	1990	8.69	39.94	3.74	2.56	17.40
7.	1991	4.91	25.72	4.39	2.90	18.37
8.	1992	6.35	37.35	3.61	2.61	15.85
9.	1993	5.51	41.65	2.43	2.27	18.07
10.	1994	5.12	47.70	2.14	1.92	16.62