

**IMPACT OF MICRO FINANCING THROUGH SHGs
ON
FORMAL BANKING HABITS**

IMPACT OF MICRO FINANCING THROUGH SHGs
ON
FORMAL BANKING HABITS

*Dissertation submitted in partial fulfillment of the requirements for the
degree of Master of Philosophy in Applied Economics of
The Jawaharlal Nehru University*

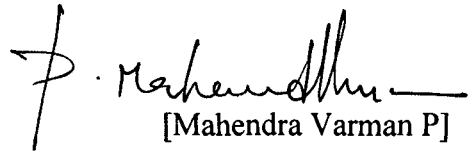
MAHENDRA VARMAN,P
M PHIL PROGRAMME IN APPLIED ECONOMICS
2001 - 2003

CENTRE FOR DEVELOPMENT STUDIES
JUNE 2003


CERTIFICATE


I hereby affirm that the work for the dissertation titled "Impact of Micro Financing through Self Help Groups on Formal Banking Habits", being submitted as a part of the requirement of the Master of Philosophy Programme in Applied Economics of Jawaharlal Nehru University, was carried out by myself and has not formed a part of any other Programme and not submitted to any other institution / University for the award of any degree or Programme of study.

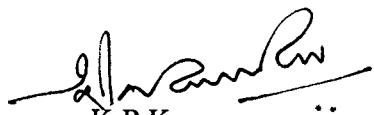
Date : June, 2003


[Mahendra Varman P]

Certified that this study is the bonafide work of Mahendra Varman P, carried out under our supervision at Centre for Development Studies, Thiruvananthapuram


D Narayana
[Fellow]


Achin Chakraborty
[Associate Fellow]


K P Kannan
[Director]
Centre for Development Studies

ACKNOWLEDGEMENTS

I remember with gratitude, all the persons who have contributed towards the materialization of this work. First and foremost I acknowledge my supervisors, Dr. D Narayana and Dr. Achin Chakraborty under whose guidance and support this work was carried out. It was an honour and privilege for me to work with them. Dr. Narayana introduced me to the fascinating area of Micro Finance and has given full encouragement, inspiration, advice, suggestions and valid criticisms at all stages of my work. His commitment to academics was a tremendous source of inspiration for me. Dr. Achin always offered his helping hands whenever required during the course of my work and his encouragement remains as an enduring source of inspiration throughout.

I am grateful to Dr. U S Mishra and Dr. P K Panda for offering critical comments and valuable suggestions at the data analysis stage of my work. Dr. Mohanan Pillai, Dr. Pushpangadan and Dr. Suresh Babu gave encouragement and important points on my research proposal, during my 'work-in-progress' seminar. Dr. Ravi Raman, Dr. Vijayamohanan Pillai, Dr. Harilal and Dr. Irudaya rajan showed keen interest in my study. I express my heartfelt thanks to them all. I place my deep gratitude to all my teachers at CDS, particularly, Dr. Kannan, Dr. Chandan Mukherjee, Dr. John Kurien, Dr. Shivanandan, Dr. Narayanan Nair, Dr. Shanta, Dr. Indrani, Dr. Shanthakumar, Dr. Mridul Eapen, Dr. Beena, Dr. Praveena Kodoth, and Dr. Michael Tharakan.

My Ph.D. seniors Achan, Azeez, Veeramani, Parameshwaran, Sunny, Venkatesan, Hari, Rajesh, Rathikanth, Ranjan, venkatji and Subrata made research at CDS a fruitful and enjoyable one. I am grateful to all my classmates, especially Vaithegi, Rudra and Gaurav who were kind and generous enough in extending their co-operation and knowledge towards successful completion of my work. I express my thanks to my seniors Indu, Tina, Shabeer, Reji, Poornima, Kiran and Rakhi for their academic and moral support. Also I acknowledge the cheerful company of my juniors Hari, Zakku, Dhanya, Aathira, Gowri, Nandana and Ashuthosh. My friendship with Francis, Prabhakaran, Jerome and Balaji deserves a very special mention.

Its beyond words to express my love and gratitude to Nija who extended her full support and co-operation throughout. It is her unbounded care and affection that made me enthusiastic and optimistic in pursuing this work.

It is a pleasure for me to acknowledge the CDS library staff for their help in tracing the required books and back volumes of journals in the library. Among them Anilkumar deserves a special thanks, who voluntarily and enthusiastically explored data sources for me. I am also thankful to the M Phil programme office staff especially Phil Roy, Shreekumari and Geetha. I gratefully acknowledge the kindness and concern shown by Mr. Soman Nair who willingly helped in academic matters.

I am deeply indebted to Anil and Rajesh Puliyaara who helped me in designing my data analysis. They extended their help whenever the data troubled me. Suresh, Saji and George were in nice company with me, whose support and entertainment I liked a lot.

I immensely benefited from Tata Dhan Foundation, an NGO located in Madurai. I extend my gratitude and thanks to Mr. Narendran, Co-ordinator for micro credit wing of the Tata Dhan Foundation for his co-operation in various arrangements that he made for quick collection of data, without which the timely submission of my dissertation was doubtful.

I am fortunate to be in the company of Mittu, Ashwin, Pranathi, Unni, Karthika, Hari and kailas. My life in the campus would have lost much of its charm and colour without the wonderful company with these little kids!

Lastly, I gratefully remember the moral support extended by my uncle, Dr. Pon Subbiah and family along with my parents during this course and throughout my life as well, to whom all this work is dedicated.

Mahendra Varman

ABSTRACT OF THE DISSERTATION
IMPACT OF MICRO FINANCING THROUGH SHGS
ON FORMAL BANKING HABITS

MAHENDRA VARMAN P

M PHIL IN APPLIED ECONOMICS, JAWAHARLAL NEHRU UNIVERSITY

2001 – 2003

CENTRE FOR DEVELOPMENT STUDIES

The sustainability of the rural financial intermediation in India has been a subject of intense debate during the last decade or so. Majority of the rural people were not encouraged to access the services of formal banks due to various reasons, such as high transaction cost, small value of transaction, problem of documentation, appropriate collateral availability with the poor, and especially due to ignorance and lack of exposure to banking system in its operations. Though many studies regarding micro-finance tell us that micro financing through SHGs have high potentials to inculcate savings habit in the poor, it was not clear whether the savings habit is in the form of deposit accounts in formal banks or savings in group itself. Some papers have indicated that it is the savings in the group and not in formal banks. An empirical study on increase in banking habits in terms of accounts in formal banks is lacking. A systematic state wise analysis of access to services of formal banks, in terms of number of deposit and credit accounts showed that, credit accounts per thousand population over the recent years were decreasing in most of the states. Since deposit account holding is a necessary condition for possessing a credit account, an in-depth analysis of deposit accounts on the basis of gender of the account holder showed that, though the overall deposit accounts per thousand population is increasing over the recent years, the per capita deposit accounts accruing to males is decreasing. On the other hand the per capita number of deposit accounts accruing to females is increasing during the same period. So the increase in number of deposit accounts per thousand population is owing to the increase in deposit accounts per thousand females. Since almost all the SHG members are women and most of the SHGs in India are linked to formal banks we suspect that the increase in deposit accounts per thousand population was an impact of development operation of SHGs in the recent years. This research makes a modest attempt to examine the issue and in the process, also tries to trace out the socio-economic factors that determine the deposit and credit account holdings (banking habits) in formal banks, among individuals and households.

The study reveals that at an individual level, the socio-economic factors such as sex of the individuals, his / her occupation, family status, education, income earnings, SHG membership and SHG leadership experience have close correspondence with account holding status of individuals. Though all the above mentioned variables have close association with account holding status, Logit modeling shows that not all of them influence the account holding status significantly when simultaneous effect is concerned. Among the variables, SHG leadership experience and education affects the individual's account holding status to a large extent. The core focus of the study, which is on the impact of SHGs on banking habits, shows that out of the total number of females who possess bank accounts, most of them are SHG members. The experience of SHG operation in a particular area matters in order to assess the degree of acceleration of banking habits among its members. The area with larger

experience in SHG operations tends to have higher proportion of its members having bank accounts. Further, it is evident from the results that leadership experience in SHGs plays a greater role in influencing the individual's bank account holding than being just a member of SHG. The analysis also makes it clear that the proportion of members who were borrowing from exploitative moneylenders before joining the SHG have decreased to a large extent after SHGs came into operation. Considering the above findings, the study concludes that, micro financing through SHGs certainly have higher degree of impact on individuals banking habits in terms of deposit and credit account holdings in formal banks.

CONTENTS

Chapter No.	Title	Page No.
Chapter I	Introduction	
1.1	The Context	1
1.2	The Issue	2
1.3	Objectives of the Study	4
1.4	Data Sources and Methodology	4
1.5	Chapter Scheme	6
Chapter II	Biased Performance of Indian Banking Sector & Evolution of SHGs	
2.1	Introduction	7
2.2	Indian banking Growth	8
2.3	Post Reforms Banking Trends	10
2.4	Recognition of SHGs as an Alternative Mechanism	12
2.5	Empirical Evidence Regarding Impact of SHGs on the Poor	14
Chapter III	Trends of Formal Credit Disbursement, Banking Habits & Growth of SHGs in India	
3.1	Introduction	19
3.2	Problem with Financial Intermediation for the Poor	20
3.3	Indian Experience of Rural Financial Intermediation	20
3.4	Trends of credit Disbursement Before & After Liberalization	22
3.5	Trends of Banking Habits During the Period 1996-2001	27
3.6	Indian Experience with Micro-Credit Programmes	32
3.7	Relationship Between Growth of SHGs and Bank Deposit Accounts	36
Chapter IV	Analysis of Determinants & Impact of Micro-Credit SHGs on Banking Habits	
4.1	Introduction	39
4.2	Profile of the Sample Village	39
4.3	Analysis of Banking Habits & Determinants at Household Level	47
4.4	Analysis of Banking Habits & Determinants at Individual Level	52
4.5	Impact of Micro-Credit on Individual Banking Habits	58
4.6	Major Findings	69
Chapter V	Summary and Conclusion	72
Appendix I		76
Appendix II		77
Appendix III		78
Bibliography		83

LIST OF TABLES

Table No.	Title	Page No.
3.1	Growth Rates of Rural Population, Rural Bank Offices, Rural & Agricultural Credit of Indian Scheduled Commercial Banks	25
3.2	Distribution of Bank Credit in Rural Sector by Occupation	25
3.3	Trends in Number and Amount Outstanding of Small Borrowal Accounts in All the Rural Financial Institutions	26
3.4	State Wise Number of Accounts per 1000 Population	28
3.5	State Wise Number of Accounts per 1000 Males / Females	31
3.6	Growth of SHG - Bank Linkage Program	33
3.7	Growth rates of SHGs & SHGs per 1000 females across the states	34
3.8	Region Wise Spread of SHG-bank Linkage Program	35
4.1	Distribution of Households According to Religion & Caste of Household Head	40
4.2	Distribution of population by Level of Education	41
4.3	Distribution of Population by Their Caste & Educational Status	42
4.4	Distribution of Population by Caste & Occupation Status	43
4.5	Distribution of Households According to Possession of Land Assets	43
4.6	Distribution of Population According to Occupation	44
4.7	Distribution of Houses by quality / Type Assessed on the Basis of Cut off Points	44
4.8	Distribution of Households According to Percapita Income	45
4.9	Representative Power of Sample Villages with Reference to Respective Districts	47
4.10	Distribution of households According to Bank Deposit Account Holding	48
4.11	Distribution of Households According to Deposit account Holding & Educational Status of the Head of the Household	49
4.12	Distribution of Households According to Bank Deposit Account Holding & Occupation of the Household Head	49
4.13	Distribution of Households with Deposit Account According to Income Group	50
4.14	Households Who Possess More Than One Bank Deposit Account	51
4.15	Distribution of Households According to credit Account Holdings	51
4.16	Distribution of Households Credit Accounts According to Income Group	52
4.17	Distribution of households According to Bank Credit Account Holding & Occupation of Household Head	53
4.18	Distribution of Bank Deposit Account by Sex of Account Holder	53
4.19	Distribution of Deposit Accounts by Educational Status of Account Holder	54
4.20	Distribution of Deposit Accounts by Employment Status of Account Holder	55
4.21	Distribution of Bank Accounts According to Income Group of the Account Holder	56

LIST OF TABLES (Continued)

Table No.	Title	Page No.
4.22	Distribution of Bank Deposit Accounts According to Distance to Bank	56
4.23	Distribution of Credit Account Holders according to Purpose & Frequency of Operation of Their Deposit Account	57
4.24	Distribution of Individuals Credit Account Holding According to Occupation	58
4.25	Distribution of Female Population on the Basis of SHG Membership & Bank Deposit Account Holding	60
4.26	Distribution of Bank Deposit Account Holders among SHG Members According to Point of Time of Opening Account	61
4.27	Distribution of SHG members According to Leadership & Bank Account Holdings	62
4.28	Distribution of Credit of SHG members By Source & Time Point	62
4.29	Co-Variates of Account Holding Status with Respect to Individuals and Households	65
4.30	Zero Order Correlation Matrix Showing the Relationship Between Socio-Economic Variables	66
4.31	Results of Logistic Regression	67

LIST OF FIGURES

Figure No.	Title	Page No.
3.1	Short-Term & Long-term Loans for Agriculture & Allied Activities By Formal Financial Institutions	22
3.2	Proportion of Short & Long Term Loans for Agriculture & Allied Activities to Total Bank Credit	22
3.3	Movement in Ratio of Credit to Deposits and Rural Bank Offices	24
3.4	Flow Chart Indicating the Procedure for Access to Formal Credit	30
3.5	Cluster Analysis Showing the Association Between Growth rate of SHGs and Growth of Female Bank Deposit Accounts in India	37

ABBREVIATIONS AND SYMBOLS

<i>A/C</i>	Account
<i>BC</i>	Backward Caste
<i>BSR</i>	Basic Statistical Returns
<i>C-D Ratio</i>	Credit-Deposit Ratio
<i>CMIE</i>	Center for Monitoring Indian Economy
<i>DRI</i>	Differential Rate of Interest
<i>FFI</i>	Formal Financial Institution
<i>FWWB</i>	Friends of Women World Bank
<i>GEN</i>	General Caste
<i>HH_Head</i>	Household Head
<i>Higher Sec.</i>	Higher Secondary
<i>HUDCO</i>	Housing and Urban Development Corporation
<i>IRD P</i>	Integrated Rural Development Programme
<i>Kms</i>	Kilo-Meters
<i>MBC</i>	Most Backward Caste
<i>MYRADA</i>	Mysore Resettlement and Development Agency
<i>NABARD</i>	National Bank for Agriculture and Rural Development
<i>NGO</i>	Non-Governmental Organisation
<i>NPA</i>	Non-Performing Asset
<i>Pop</i>	Population
<i>RBI</i>	Reserve Bank of India
<i>RESCA</i>	Regular Savings and Credit Association
<i>RFI</i>	Rural Financial Institution
<i>ROSCA</i>	Rotating Savings and Credit Association
<i>RRB</i>	Regional Rural Bank
<i>SBA</i>	Small Borrowal Account
<i>SC</i>	Scheduled Caste
<i>SCB</i>	Scheduled Commercial Bank
<i>SHG</i>	Self Help Group
<i>SHPI</i>	Self Help Promoting Institution
<i>SIDBI</i>	Small Industries Development Bank of India
<i>SLR</i>	Statutory Liquidity Ratio
<i>TRYSEM</i>	Training of Rural Youth for Self-Employment
() ¹	See Respective Footnote
()♣ ¹	See Respective Endnote

CHAPTER I

INTRODUCTION

1.1 The Context

The structure of rural financial market in India is dualistic: both formal and informal intermediaries function. The rural economic agents find the formal financial institutions (FFIs) as alien and inaccessible. The attributes, characteristics and personal circumstances of rural agents are not very much acceptable to the formal financial institutions. For both an information gap exists. Rural borrowers know themselves better than the FFIs, but does not desire to fully reveal personal and project information. The information transfer is hampered by serious moral hazards and incentive problems (Leland & Pyle, 1977).

The core problem of rural financial intermediation is high transaction costs to the banks in financing large number of small borrowers who required credit frequently and in small quantities. The same holds true of costs involved in providing savings facilities to small and scattered savers in rural areas. The rural savers and borrowers also face high transaction costs while dealing with banks due to distance, small value of transaction and less exposure to formal bank procedures. (Nanda, NABARD)¹

Besides high transaction costs, the perception of risk in serving the rural people, who are unable to offer physical collateral and articulate their case for or submit proper loan proposals, the urban orientation of the banks, and lack of flexibility in their operations are some of the other constraints. From the banking service point of view, the banking system have remained inaccessible to a majority of the poor because of high transaction costs, information gap between the banks and the client and factors such as provision of principal collateral. On the other hand, from the client's point view, it is mainly the ignorance and lack of exposure to the banking system and its operations that they are unable to access the banking services. In such a situation information asymmetry is inevitable and verification of true credentials by an outside lender (banks) proves to be costly (Madeswaran & Dharmadhikari, 2001).

¹ For references quoted "Nanda, NABARD", see Website <http://www.gdrc.org/icm/nanda-link.html>

If it is very difficult for the formal banks to change their strategy such that the accessibility of banking services to the poor increases, is it not possible for the upcoming self-help groups (SHGs) to persuade the poor, bring them out from ignorance, expose them to banking system in its operations, and inculcate banking habits in them such that majority of the poor can access formal banking services? Banking habit is very important for an individual or a household for averting the risk of shortage of funds for his livelihood.

Micro-finance programs are important institutional devices for providing small credit to rural poor in order to alleviate poverty. Micro-financing programmes through SHGs, introduced and expanded by Non-Governmental Organisations (NGOs) in several parts of India, have the potential to minimize the problem of inadequate access of banking services to the poor (Rajasekhar, 2000). They can influence savings. Likewise many studies [Rajasekhar (2000), Kumaran (2001), Hashemi (1996), Lathif (2001), Kaladhar (1997), Majumdar (1997), NABARD (2001-02)] highlight that SHGs have inculcated savings habits in the poor. But some of these studies have not specified whether the increase in savings is measured in terms of savings in SHGs or saving in banks by way of operating bank deposit accounts. On the other hand many authors have indicated the increase in savings in SHGs alone. Since most of the SHGs are linked to banks, our study focuses on examining whether micro-financing through SHGs have made any impact on accessibility of formal banking services to the poor in terms of deposit and credit account holding status.

1.2 The Issue

Credit is a crucial input for economic development of individuals and households especially in rural areas. Rural households need credit for a variety of reasons. They need credit to meet requirements for working capital, long term investment in agriculture and other income bearing activities apart from credit needs for food, housing, health, education and other social obligations (Ramachandran & Swaminathan, 2001)². If the credit needs of the poor are to be met, rural households need access to credit institutions that provide them a range of financial services and

² Refer Website <http://www.ilo.org/public/english/protection/ses/download/docs/2india.pdf>

provide credit at a reasonable rate of interest. Such institutions in India happen to be the formal banks.

But a simple trend analysis of credit disposal of the formal banks, on the basis of (i) trend of credit amounts and accounts of the formal banks accruing to agriculture and rural development, (ii) number of rural bank branches, (iii) priority sector lending, (iv) the movement of credit-deposit ratio in rural areas and (v) the trends in amount and number of small borrowal accounts (SBA's) in the formal banks showed that credit to agriculture and rural development was decreasing especially after financial liberalization. Apart from the credit to agriculture and rural development, even the overall credit accounts was decreasing. This was revealed by a state-wise analysis of over all bank credit accounts. While probing into the reason for decreasing trend of overall credit accounts, it was found that the trend of deposit accounts could be a major cause for the trend of credit accounts, since to hold a credit account, deposit account holding is a necessary condition.

Simultaneously a state wise analysis of the trend of deposit accounts showed that, though there is a an increase in deposit accounts among most of the states, on an average there happens to be only 418 accounts per thousand population. There is a wide disparity in this statistics among the states. At the same time the analysis of deposit accounts on the basis of gender of the account holder showed that, the number of deposit accounts accruing to females is increasing over the recent years (from 1996 till now) and on the other hand the deposit accounts accruing to males is decreasing. Interestingly, the overall number of deposit accounts per thousand population was increasing. So the increase in number of overall deposit accounts was proven to be just because of the increase in the number of deposit accounts accruing to the females.

Given that almost all the micro-credit SHG members in India are women, we have tried to seek answers to the following questions:

Is it that the increase in deposit accounts accruing to females over the recent years due to the operation of micro-credit SHGs? If only 418 people out of thousand is in possession of deposit accounts, then who are the people privileged to possess

accounts? To which category³ do they belong? If there is a wide disparity in number of deposit account holders among the states, then what are the socio-economic factors that determine these disparities?

Similarly, the analysis of trends and patterns of credit accounts showed that the number of credit accounts per thousand populations decreased over the years. It also projected that, on an average there are only 51 accounts per thousand population. However it showed a high disparity in number of accounts per thousand population among various states. Most of the states that have higher number of deposit accounts per thousand populations seem to be socially and economically developed states.

So if there are only 51 accounts per thousand population then who are the people who are deprived of formal credit? Which category of people are they? Does the micro-credit programs through SHGs effectively serve these excluded population and ease them from the clutches of the moneylenders? What are the probable causes for the interstate disparities in number of credit accounts per thousand population? These are few issues that probe research and in-depth analysis. This study makes a modest attempt to deal with these issues.

1.3 Objectives of the Study

- To examine the association between the experience and operation of self-help groups and the banking habits among the females.
- To trace out the socio-economic factors that determine the individual and household banking habits and sort out the factors that influences the most, and
- To analyze the impact of self-help groups on individual and household banking habits

1.4 Data Sources and Methodology

The major sources of secondary data used for analyzing the trends and patterns of various banking variables among the states and over the years are; various publications of Reserve Bank of India (RBI), National Bank for Agriculture and Rural Development (NABARD), All India Census and Centre for Monitoring Indian

³ Category here means, religious / caste category / educational category / occupational category / income category / SHG membership category.

Economy (CMIE). The data regarding variables such as bank deposit and credit accounts / amounts, bank branches, small borrowal accounts, etc. were collected from various issues of “Basic Statistical Returns of the Scheduled commercial Banks” (previously named as ‘Banking Statistics’) and “Hand Book of Statistics on Indian Economy” published by RBI. The C-D ratios of banks over the years were collected from publications of CMIE.

Data regarding self-help groups across states and over the years were collected from various issues of “NABARD and Micro-finance” published by NABARD. Population information for the year 2001 was taken from the “Provisional Population Totals” published by Census of India, 2001. The projected population for the intermediate years, starting from 1996 to 2000 were taken from “Population Projections for India & States, 1996 –2016” published by Census of India, 1991.

Since the available secondary data was insufficient to answer the questions evolved out of the discussion, required data was collected from two appropriately sampled villages of Tamil Nadu. A purposive sampling of two villages have been done wherein the villages surveyed needed to have certain characteristics so that the impact of micro-credit SHGs on banking habits can be clearly captured. Accordingly, two villages, viz., Kavarayapatty and Pottapatty were selected as sample areas. Though the villages are sampled ones, the number of cases came from a census that was conducted in both the villages. Kavarayapatty has a total population of 103 households and that of Pottapatty’s total number of households is 114. Out of the two villages surveyed one village (Kavarayapatty), happens to be a less experienced village in terms of number of years of operation of SHGs (2 Years) which belonged to Dindigul district. The other village (Pottapatty) was comparatively having a larger exposure to SHG operation (6 Years) and this village belongs to Madurai district of Tamil Nadu.

Information regarding household characteristics, economic status, banking habits and participation in SHGs were some of the important variables that were needed for our analysis. A structured questionnaire was used to collect such information from the households and individuals. All the questions in the questionnaire were of objective

type. A copy of the questionnaire is attached as appendix in this thesis (Refer Appendix III).

1.5 Chapter Scheme

The study is organized in five chapters, including this introduction. Chapter II reviews the performance of Indian banking sector and discusses the evolution of SHGs. The chapter highlights various stages of development and weakening of rural financial intermediation. It emphasises the concept, characteristics, and necessity of the alternative mechanism for serving the poor, viz., the SHGs. A brief discussion of the problems faced by banks in rural financial intermediation is preceded by a detailed analysis of trends and patterns of credit disbursement, banking habits and growth of SHGs in chapter III. Chapter IV, while trying to bring out solutions to the outlined objectives, traces the socio-economic factors that determine the individual's and household's banking habits and sorts out the major factors, using cross-tabulation and multivariate analysis viz., Logit model. It further examines the impact of micro financing through SHGs on individual and household banking habits. The summary and concluding remarks are presented in chapter V.

CHAPTER II

BIASED¹ PERFORMANCE OF INDIAN BANKING SECTOR & EVOLUTION OF SHGS

2.1 Introduction

On the basis of a review of literature, this chapter brings out the weakening of formal credit to agriculture and rural development in India and the evolution of self-help groups (SHGs). It then goes on to discuss the concept and common characteristics of SHGs. Finally, this chapter throws some light on the empirical evidence regarding the impact of SHGs on several social and economic aspects in various countries with special reference to India.

The discussion of this chapter revolves around four issues. In section 2.2 we discuss the growth of banking sector in India. Starting with a discussion of the banking growth in the pre-nationalization era, explaining how they were operating especially in the area of credit disbursement. Then it goes on to discuss the necessity for nationalizing the banks. In the same section we discuss the impact of nationalization on the progress of branch expansion, deposit mobilization, expansion of bank credit and increase in priority sector lending. The regulatory regime under which banks had to function ultimately led to the decline in profitability, productivity and efficiency of the Indian banking sector (Tara, 2000). This section also highlights the consequent banking sector reforms, implemented since 1991.

In section 2.3, we discuss how the banking trends in terms of various indicators have changed following the macro-economic adjustment and banking sector reforms in 1991. Further, in this section we also highlight the problems faced by the poor due to the shift in the banking trends after reforms.

Section 2.4 discusses the evolution of SHGs as an alternative mechanism for efficient rural credit delivery along with the concept and characteristics of SHGs. Further, this section discusses the linking of SHGs with formal banks, and the necessity, importance and advantages of linking SHGs with formal banks. Finally, section 2.5 deals with the empirical evidence on impact of SHGs in various countries with special reference to India.

¹ Biased in favour of the urban areas, neglecting to serve the rural areas.

2.2 Indian Banking Growth

2.2.1 Pre-Nationalization

The banking system is an important intermediary through which the savings of the community are channelised and is a key constituent of capital formation and economic development. Indian banking system went through a series of crisis and consequent failures during the first half of 19th century (Bhatt.et.al, 2000). During the pre-nationalization period, i.e., before 1969, the banking system was controlled by groups of industrialist and business magnets, which used the public funds for satisfying private needs. Till the end of 1960's, banking was largely an urban / semi-urban phenomenon with 80 percent of the branch offices confined to urban / semi-urban areas and almost 97 percent of the deposits originating in these areas. The rural areas contribute only about three percent of the total bank deposits.

Credit markets are known to be imperfect and commercial banks in India bypassed vast segment of the Indian population before nationalization of the banks (Narayana, 2000). As a result, the emergence of sectoral imbalances crept in. The small scale and household industrial sectors, small business, artisans and rural poor in general were deprived of banking facilities (Raju, 1992). Agricultural credit was never seriously considered by banks. It was also not coordinating with the planned development of the nation. Thus the banking development prior to the nationalisation of banks was lopsided, urban-biased and privately controlled. It was for these reasons that the Government of India, in 1969, nationalized 14 major commercial banks and also in 1980 took over another 6 banks.

2.2.2 Why Nationalization?

The sole objective of nationalization of banks, was to make them lend to agriculture, small-enterprises, and artisans in the rural and semi-urban areas (Narayana, 2000). The approach to be adopted for achieving these goals is through rapid branch expansion in all the regions especially in the un-banked and neglected areas.

The main reasons for nationalization of the banks can be summarized as follows:

(a) Increase the total savings / deposits mobilization.

- (b) Secure an increase in the total volume of industrial credit, for agriculture and rural development, by way of priority lending and subsidized credit.
- (c) Inculcate banking habits among the people by way of expansion of bank branches to all areas, particularly the un-banked and neglected areas.
- (d) Direct a large share of the total credit to the weaker sections, to help them foster their economic activity, by way of extending small loans at differential rate of interest (DIR).
- (e) To relieve the poor from the clutches of the exploitative moneylenders.
- (f) To reduce regional imbalances.

2.2.3 Banking System in the Post Nationalization Period

In the post-nationalization period, i.e. after 1969, the Indian banking system progressed by leaps and bounds. Under the system of branch licensing, bank branches expanded rapidly in both rural and urban areas, especially in the un-banked and neglected areas. By the end of 1989 the rural bank branches consisted of nearly 57 percent of the total bank branches (Narayana, 2000). In addition to this category of branches of Scheduled Commercial Banks (SCBs), a new class of institution called the Regional Rural Banks (RRB) have been set up for enhancing rural credit, since 1975. These banks are exclusively meant for financing the agriculturists and the rural poor (Vyasulu & Rajasekhar, 1991). Banking sector achieved many social and economic goals in the form of extending the geographical reach and financial spread of the banking services.

The banking sector had recorded rapid progress in the field of branch expansion, deposit mobilization, expansion of bank credit and increase in the priority sector lending. It also extended its trend towards development orientation and undertook para-banking activities. Despite the impressive progress, in the two decades following the nationalisation, both in quantitative as well as qualitative terms, the excessive controls such as directed investment² and directed credit³ programs enforced on banks by the government, fostered certain rigidities and inefficiencies in the commercial banking system, which not only hindered development but also eroded their profitability (Bhat. et.al, 2000).

² Directed investments such as SLR.

³ Directed lending such as priority sector lending, differential interest rates, subsidised credit.

2.2.4 Banking Sector Reforms

In order to improve the profitability, productivity and efficiency of the banking sector, Narasimham committee was appointed in the year 1991 which recommended substantial reforms in banking sector (Narasimham, 1991). The recommendations include

- (a) Statutory Liquidity Ratio (SLR) requirements to be brought down to 25 percent from the then existing 38 percent of net demand and time liabilities.
- (b) The rate of interest on priority sector lending to be brought closer to the rates of interest that is imposed on general bank credit.
- (c) Directed credit programs be phased out in the long run, redefine priority sector and review concessional interest rates.
- (d) Freedom of entry & exit of banks.
- (e) Allow interest rate to perform according to the market, instead of regulations.

Numerous other recommendations were also made on capital adequacy norms, structural organizations, and other matters that are not relevant here.

2.3 Post Reforms Banking Trends

However, the post reform banking trends seems to be slowly reversing the trends of the two decades since nationalization. The liberalization of banking has aggravated the imperfections in the credit market. The natural bias of banks has come to the fore and they are increasingly withdrawing from lending to agriculture, small enterprises and such activities. Bank expansion into rural and un-banked areas has also stopped. Such withdrawal would have an adverse impact on the investment and output in agriculture and small industries (Narayana, 2000). This reluctance of the scheduled commercial banks to provide the credit needs of the rural poor had many reasons behind it. Some of them may be as given below: (Fernando, 1995)

- (a) The rural poor did not have any capacity to save; they needed small credits very often for consumption and production maintenance needs.

- (b) Determining the riskiness⁴ of potential borrowers and monitoring the progress of clients is particularly difficult when clients are very poor-low income households, who lack assets to put up as collateral.
- (c) The high transaction cost in extending credit of very small amount emerged as a barrier to the banker to lend to the poor people.
- (d) The non-performing assets were increasing and the recoveries of dues were very low.
- (e) The burden of subsidised interest rates, non viability of operation and heavy dependence of these banks for concessionary outside funding or refinancing, further weakened the banks in way of extending rural credit to the poor.

Besides this, the rural economic agents find the formal financial institutions as an alien, inaccessible and which exists to serve the needs of the “others”⁵ (Dasgupta, 2001). Transaction cost involved in the borrowings and savings in a bank happen to be high for a poor man. A small rural borrower raising a loan from a formal financial institution, under poverty alleviation programme was placed at 24.6 percent, while the transaction cost of operating a savings account with bank was placed as high as 10 percent of savings, on the assumption of one transaction per month (Nanda, NABARD⁶). Further, apart from the high transaction cost many rural poor lack exposure to the banks, are unable to offer physical collateral, submit a proper loan proposal and formal financial institutions lack flexibility in their operations. This resulted in the inaccessibility of the services of the formal financial system to the rural poor.

Due to the above mentioned reasons, the rural poor were relying on informal credit channels such as local moneylenders, market vendors, shopkeepers and others including friends and relatives. Credit in the informal system is usually available immediately, when and where required and often without collateral & lengthy documentation formalities, since the lender relies on personal knowledge of the borrower and his surroundings. However the interest rates are not only extremely high, but sanctions often include conditions, verbal or written, which are heavily

⁴ This risk factor is mainly due to the information asymmetry between banks and the rural households and the relationship between the borrower and the lender rarely developed.

⁵ Those who don't fit in to the concept of poor i.e the rich people.

⁶ For references quoted “Nanda, NABARD” see Website <http://www.gdrc.org/icm/nanda-link.html>

loaded in favour of the lender and are detrimental to the interest of the borrowers (Nanda, NABARD).

2.4 The Recognition of SHGs as an Alternative Mechanism

In the wake of the inaccessible and inconvenient banking systems against the poor, the availability of alternative financial services could do much to improve the welfare of the poor and their families. Against this backdrop, evolving a mechanism for meeting the economic disparities and credit needs of the rural poor in the form of self-help groups (SHGs) seems a possibility. Hence, the need for SHGs was felt during the later periods, in the late 1980s. The SHGs were later recognized as an alternative way of improving the rural credit and there by giving self-employment and enhance the economic activities of the poor.

2.4.1 Concept of Self Help Group (SHG)

Self Help Groups are mostly informal groups whose members pool their savings and relend within the group, on rotation and need basis (Karmaker, 1999). In international dictionary these informal groups have been termed as Rotating Savings & Credit Associations (ROSCA) and Regular Savings & Credit Associations (RESCA). In ROSCA the fund is given to each member in rotation until every one finishes, and once again it starts with the same rotation cycle. In RESCA it is non-rotating. Several loans are made simultaneously to their members from the pool of savings. Whereas in ROSCA the fund does not grow in its life cycle, in RESCA the fund grows because of periodic contribution and repayment of loans (Dasgupta, 2001).

2.4.2 Common Characteristics of SHGs

Based on local conditions and requirements, the SHGs have evolved their own methods of working. Some of the common characteristics in functioning of these groups are indicated below. (Karmaker,1999)

- (a) The groups usually create a common fund by contributing their small savings on a regular basis.
- (b) Most of the groups themselves, or with help of NGOs, evolve flexible systems of working and managing their pooled resources in a democratic way, with participation of every member in decision-making.

- (c) Request for loans are considered by the group in their periodic meetings and competing claims on limited resources are settled by consensus.
- (d) Loaning is done mainly on trust with a bare minimum documentation and without any security.
- (e) The amounts loaned are small, frequent and for short duration.
- (f) The loans cover a variety of purposes.
- (g) Rate of interest differs from group to group and even with purpose. Interest charged is generally higher than that charged by banks and lower than that charged by moneylenders.
- (h) Periodic meetings of members also serve as a forum for collecting dues from members.
- (i) Defaults are rare mainly due to group pressure and intimate knowledge of end use of credit.

In India the SHGs made a beginning with one of the NABARD funded projects on 'savings and credit management of self help groups' of Mysore Resettlement and Development Agency (MYRADA) in 1986-87. Again in 1988-89, NABARD undertook a survey of 43 NGOs spread over eleven states in India, to study the functioning of SHGs and possibilities of collaboration between the banks and SHGs in the mobilization of rural savings and improving the delivery of credit to the rural poor (Dasgupta, 2001).

The survey results were encouraging, which made NABARD to impress upon Reserve Bank of India (RBI). In response to that RBI, in July 1991, advised the commercial banks (later RRBs and Co-operatives) to extend credit to the SHGs under the pilot project of NABARD, wherein 500 SHGs all over India were covered. Since then SHGs became a regular component of the Indian financial system. Further, in 1994 RBI constituted a working group to formalize the mechanism to larger extent and to review the functioning of NGOs and SHGs in expanding and deepening their role in the rural sector. In response to the recommendations RBI advised the bank lending to SHGs be considered as an additional segment under priority sector.

Many of these SHGs got formed around a specific production activity, promoted savings among members and use the pooled resources to meet the emergent needs of the members, including consumption needs. Some times internal savings generated were supplemented by external resources loaned / donated by voluntary agencies which promote SHG's. These self help promoting institutions (SHPIs) along with other non-Governmental organizations and banks who promote SHGs, get refinance from different national institutions like National Bank for Agriculture and Rural Development (NABARD), State Industrial Development Bank of India (SIDBI), Friends of Woman World Bank (FWWB), Housing & Urban Development Corporation (HUDCO) etc.

2.4.3 Linking SHGs with the Formal Banks

By linking SHGs with formal banks, both the banks as well as the SHGs are expected to benefit. Whereas the banks gain from the new credit market and a potential surplus sector [i.e., SHGs] and at the same time SHGs enjoy the advantage of much larger and cheaper resource (Dasgupta, 2001). Involvement of SHGs with the banks could help in overcoming the problems of high transaction cost in providing credit to the poor, by passing on some banking responsibilities regarding loan appraisal, follow-up and recovery to the poor themselves. In addition to that, the character of SHGs and the relation with their members offered a way for overcoming the problem of collateral, excessive documentation and physical access which reduced the capacity of formal financial institutions to serve the poor (Nanda, NABARD).

2.5 Empirical Evidence Regarding Impact of SHGs on the Poor

Reviewing the available literature reveals a limited number of studies being done on micro-credit, SHGs and their impact on rural poor, especially with reference to India. Many of these studies⁷ reveal that micro-credit programs are important institutional devices for providing small credit to the rural poor in order to alleviate poverty. And they suggest that increased availability of micro-credit to the poor will enable the rural households to take up larger productive activities increase savings, empower the poor women and decrease the dependence on exploitative local money lenders.

⁷(Lathif, 2001), (Namboodhri & .Shiyani, 2001) , (Mark.M.Pitt,2000) , (Khandkar,2000)

However there are other researchers⁸ who caution against such optimism and point to the negative impacts that the micro-finance have led to. One of the papers, with reference to Africa, argues that despite the incredible growth over a decade in micro-credit programs throughout Africa, there appears to be little evidence to suggest significant and sustained positive impacts for the supposed beneficiaries⁹ (Buckley,1997). Buckley quotes that “rather than being a panacea to the problem of development, the starting point for viewing the informal sector is as a symptom of unjust development, the result of the systematic denial of basic rights to education, health, etc.”¹⁰ Others [Adams & Pischke (1992), Rogaly (1996), Montgomery (1996)] also support these arguments. In-between these two contrary arguments there are studies¹¹ that identify beneficial impacts but argues that micro-finance does not assist the poorest.

The success of the micro-finance intermediation can be studied at three levels viz., (i) outreach and financial sustainability of the Programme, (ii) income or poverty impact on members and (iii) development of financial markets at the local level (Tara, 2001). But most of the micro-finance programs globally are evaluated on the basis of the first indicator. There happens to be contradictory views regarding the impact of micro-credit on the society and economy, and further in many of the studies with reference to India, the knowledge of impact of micro-credit remains only partial and is contested.

A fairly good number of empirical studies have been carried out in the recent past on relationship between micro-credit and women’s welfare [Sengupta (1996), Khandhker (1998), Lakshmi & Gupta (2002)]. A recent study by Rehman (1999) brings out that the much acclaimed methodology of the bank (Grameen Bank), contributes to considerable disempowerment of poor women. It has reported that insistence on increased disbursement of loans and high recovery rates force the bank workers and borrowing peers to inflict excessive pressure on the women clients and escalation of

⁸(Buckley, 1997), (Adams & Pischke,1992) , (Rogaly,1996) , (Montgomery,1996) , (Navjas et.al.,2000).

⁹ In terms of increase in assets, increase in income flow of the household or the level of employment.

¹⁰ Graeme Buckley, 1997, pp 1091.

¹¹ (Navjas et.al.,2000).

domestic violence. In order to maintain their regular repayment schedules they enter a loan recycling process, which increases their debt liability and increase tension and frustration among household members. These findings brought to the fore the evidences of a discomfoting phenomena, i.e., women's exploitation serving as link to capital.

Lathif (2001) while analyzing the effect of micro-credit on household savings, using multiple regression analysis, found that for households of similar income categories, the savings-income ratio are significantly higher among programme participants than among the non-participants. He says that possibilities are higher for achieving substantial increase in national savings and thereby capital formation, if the micro-credit programs are continued. But this analysis seems to be partial because it takes into account only the programme participation effect. It ignores the programme placement effect, through which one can examine whether the presence of a program itself increases the proportion of households who save or not. On the other hand, taking the programme placement effect into consideration we can examine whether the availability of the programme increases the incidence of borrowing of the poor. This needs a comparison between a program and a non-program area.

Datta & Raman (2001), tries to find out whether heterogeneity and social cohesion co-exists in self-help groups and also examines the determinants of the performance of SHGs in terms of savings mobilization, lending operations and debt recovery. They came to the conclusion that heterogeneity¹² and social cohesion can co-exist and still give a better performance. On the other hand, they found that lesser dependence of the SHGs on external resources, higher education of members, higher loans provided in the current year, lower SHG expenditure, and stronger ties among their members contribute to higher SHG net income. Their analysis also shows that the increase in distance between the residence of members result in higher SHG net income per member.

¹² In terms of operation, social & economic background of the members, actual distance between the members, age of the SHG, educational status of different members of the group, etc.,

Pitt (2000) examines the effect of group based credit for the poor on the household mix of agricultural contracts¹³ and supply of labor. He found that these group based micro-credit programs substantially alter the mix of households, in particular there is strong and significant increase in own cultivation, through share cropping. Group based credit helps in diversifying income and smoothing consumption need that permits households to choose higher return but riskier agricultural contracts.

Khandkar (2000) while estimating, the impacts of micro-finance on savings and borrowings found that micro-credit not only increases involuntary savings but also it has induced voluntary savings. More importantly it has decreased the dependence and borrowing from informal sources such as exploitative moneylenders. However here only the effect of income through micro-credit on savings is considered. But the viability and sustainability of the programme is a very important aspect that calls for research. For instance, the effect of change in income resulting from micro-credit on savings can be estimated to know whether the people prefer to continue as members of SHG even after the increased income, whether changes in income leads to proportionate (disproportionate) increase (decrease) in savings, the rate of repayment and recovery.

A study by NABARD, which covered 560 SHG member households from 223 SHGs across 11 states, showed many positive results on the impact of participation of rural poor in the SHGs. It shows that there have been perceptible and wholesome changes in the living standards of the SHG members in terms of ownership of assets, increase in savings and borrowing capacities, income generating activities and in income levels. It traces out that almost all members developed savings habit in the post SHG situation as against only 23 percent of households who had this habit earlier. Average annual savings per household registered an increase over three-fold. NABARD study also shows that the average borrowing per year per household increased atleast twofold (NABARD, NABARD and Micro-Finance, 2001-02).

¹³ The amount of land sharecropped & rented, and the extent to which the agricultural labor supply takes the form of own cultivation as opposed to wage labor.

However the study nowhere mentions the basis of measurement of the change in savings and borrowing habits. Whether they measured in terms of number of bank deposit and credit account holders or in terms of any other forms of savings and borrowings is not clear. Other studies [Khandker (2000), Rajasekhar (2000), Kumaran (2001), and Lathif (2001)] measure the impact of micro finance on household savings and borrowings in SHGs only and not in formal banks.

Since most of the SHGs are linked to formal banks for their deposit and loan mobilization, it is a researchable issue, to trace out whether the micro finance intervention through SHGs have made any impact on the deposit and credit accounts in the formal banks. On this basis, chapter III empirically traces out and explains the relationship between bank accounts and the growth of SHGs, and the criteria by which one can assess the impact of SHGs on bank account holdings. Further chapter IV presents the analysis based on survey data and finally chapter V summarizes and concludes.

CHAPTER III

TRENDS OF FORMAL CREDIT DISBURSEMENT, BANKING HABITS AND GROWTH OF SHGs IN INDIA

3.1 Introduction

On the basis of available secondary data this chapter tries to trace out the trend of formal rural credit amounts as well as accounts. It associates the trend of credit accounts with the trend of deposit accounts through the norms of formal credit accessibility. Further, the chapter analyses the trend of deposit accounts overall as well as deposit accounts classified according to gender of the account holder. Ultimately, the trend in deposit accounts is attributed to growth of SHGs due to the observed positive association between growth rates of percapita deposit accounts pertaining to females and growth of SHGs per 1000 females.

The discussion of this chapter is organised in seven sections. Section 3.2 discusses the problem of formal financial intermediation with regards to the poor and the low-income groups. Here, it discusses the problem of ignorance of the poor, risk elements for the banks and transaction cost involved in extending credit to the poor.

Section 3.3 throws light on the Indian experience in formal rural financial intermediation. It briefly speaks about the beginning of institutionalisation of credit, the developments that took place in banking sector over the years and the deterioration in the later years.

With the help of secondary data, section 3.4 tries to trace out the declining trend of credit disbursement to agriculture and rural poor, in terms of credit amount as well as small borrowal accounts. Section 3.5 attributes the decreasing small borrowal accounts to the trends in banking habits¹. It further questions the observed trend of banking habits, whether it is due to the growth of micro-credit SHGs. Section 3.6 is being introduced in order to give an insight on experience of micro-credit programmes in India. Finally section 3.7 examines the association between growth of SHGs per thousand females and deposit accounts per thousand female population.

¹ Banking habits here refers to deposit and credit account holdings of individuals.

3.2 Problem with Financial Intermediation for the Poor

From the literature on financial system in India, we may observe that there are broadly two kinds of financial intermediation, viz., general financial intermediation and rural financial intermediation. As we are going to deal mainly with the banking needs of the poor and low income groups, we confine our focus to the issues in rural financial intermediation alone. The rural financial system as it has evolved in India, operates through two sets of institutions, viz., the formal financial institutions (FFIs) and the informal sector².

The formal institutions do not show much enthusiasm to put their resources in rural and backward areas for the benefit of the poorer people as these are commercial organizations and are basically interested in their profitability and sustainability (Dasgupta, 2001). As the rural areas lack infrastructure, entrepreneurship, opportunities and people are victims of exploitation and ignorance, the perceived high risks, transaction costs in extending credit of very small amount keeps the poor away from the fold of formal financial institutions (Namboodiri & Shiyani, 2001). Further, determining the riskiness of potential borrowers and monitoring the progress of the clients is particularly difficult when they are poor low-income households, who lack asset to put up as collateral. Given this situation, lending to rural poor may lead to low recovery and the subsequent rise in Non Performing Assets (NPAs), decreasing the profit, thereby decreasing its viability and sustainability. In such circumstances rural financial intermediation by FFIs could be a very risky venture.

3.3 Indian Experience of Rural Financial Intermediation

The experience of India in the rural financial intermediation is quite interesting, exhibiting different performance growth during different time periods over the years. The rural credit system in the country has undergone radical changes in respect of focus, structure, and approach over time. The institutionalization of credit started with establishment of co-operatives following the enactment of co-operative societies act in 1904. The rural credit survey committee (RBI, 1954), intensified the efforts made to develop co-operatives. In the meanwhile, the review undertaken by the All India Rural

² Formal Financial Institutions (FFIs) refers to SCBs, RRBs and Cooperative Banks, while Informal sector refers to informal lenders such as Money lenders, Land lords, Friends and so on.

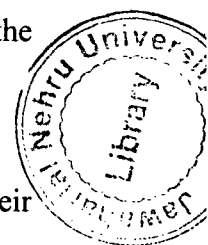
Credit Review Committee (RBI, 1969) found that the co-operatives had not performed up-to the expectation in mobilizing deposits and disbursing credit at retail level. The review committee therefore felt that the efforts of the co-operatives had to be supplemented, and recommended adoption of multi-agency approach to provide credit to rural areas with much larger role for commercial banks.

In 1969, fourteen major commercial banks and again in 1980 another eight commercial banks were nationalized. By nationalization it was thought that banks could be made to lend to agriculture, small enterprises and artisans in rural and semi-urban areas (Narayana, 2000). The other reasons behind it were, to increase deposit mobilization, to direct large share of total credit to the weaker sections & help them foster their economic activities by way of extending small loans at differential rate of interest (DRI), to inculcate banking habits, to release the poor borrowers from the clutches of the money lenders, to reduce the regional imbalances and so on.

Thus, with nationalization of banks, a special responsibility of stepping up their advances for agriculture and allied activities was given to them. The flow of credit has increased to a significant level, but surprisingly, the benefit of such increased credit flow bypassed the relatively weaker sections of the rural community (Agarwal, et.al, 1997). Because of this the Regional Rural Banks (RRBs) were added as a third constituent of rural credit system in 1975 especially to cater to these sections.

Later in 1991 it was found that, despite the impressive gains made by the rural financial institution (RFIs) in terms of resource mobilization, geographical coverage and functional reach in the two decades after nationalization, there was serious deterioration in the health of the system. Hence the Narasimham committees report on the financial system (1991), suggested substantial reform measures³ and many of them are fully or partially implemented. The trend of institutional credit to agriculture and rural development over the years after nationalization of commercial banks can be classified into two phases. Trend before financial sector liberalization i.e., from 1969 to 1991 and trend after liberalization (from 1991 till now)

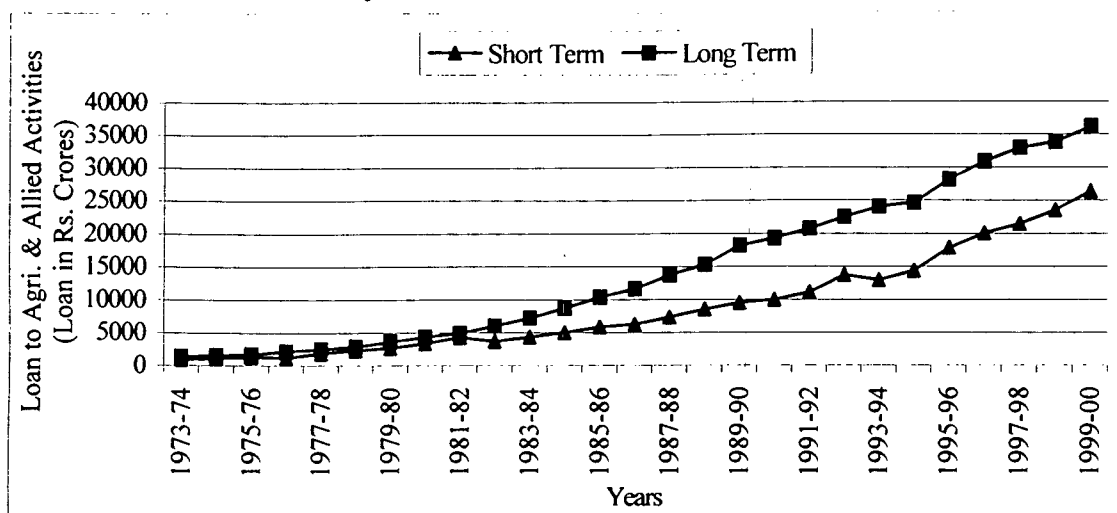
³Please see chapter 2, section 2.2.4 to know the reform measure suggested.



Div
332.17520954
M277
Im

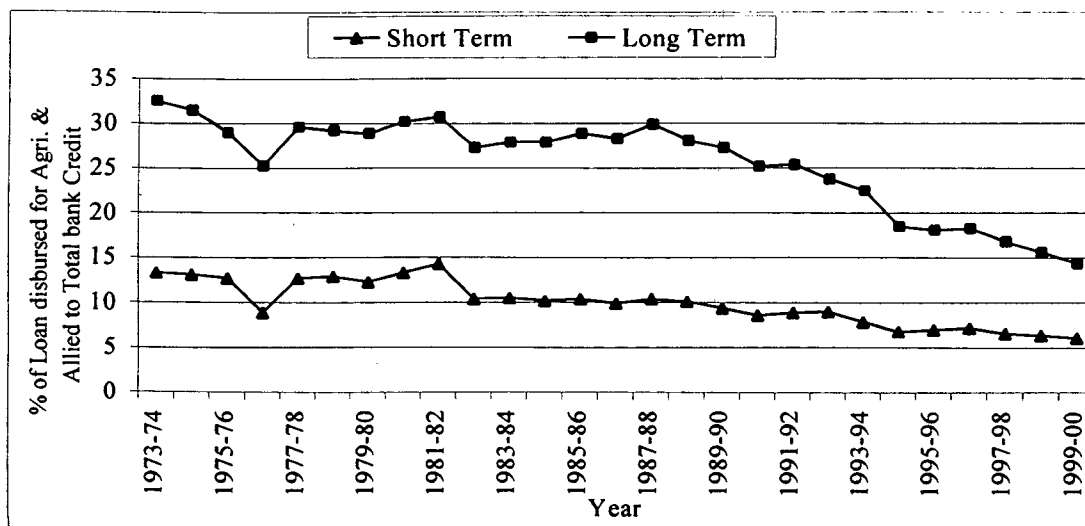
TH 109 60

Figure 3.1
Short-Term & Long-term Loans for Agriculture & Allied Activities
by Formal Financial Institutions



Source: RBI, Hand Book of Statistics on Indian Economy, 2001 (Data in Appendix I)

Figure 3.2
Share of Short & Long Term Loans for Agriculture & Allied Activities in
Total Bank Credit



Source: RBI, Hand Book of Statistics on Indian Economy, 2001 (Data in Appendix I)

3.4 Trends of Credit Disbursement from 1969 till 1991 and from 1991 till Now

Though the absolute amount of credit flowing to agriculture and allied activities-short term and long term, has increased over the years the share of agriculture credit in total bank credit fell to a great extent [Figure 3.1 & 3.2, Appendix I for data]. The short-term credit amount outstanding rose from 985 crores in 1973-74 to Rs 26387 crores during 1999-2000. The long-term credit amount outstanding rose from 1420 crores to

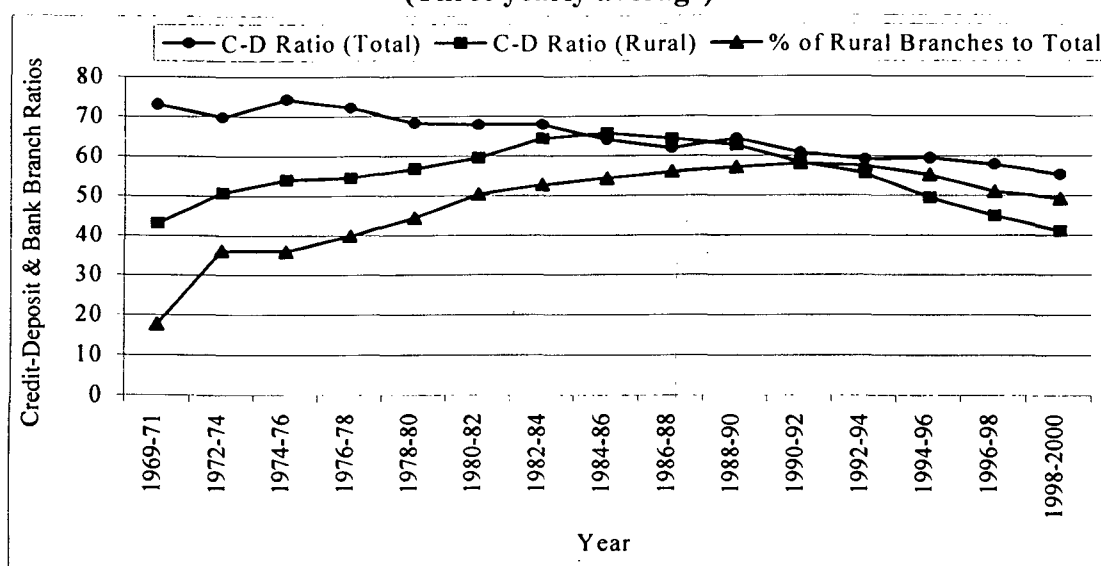
36220 crores during the same period. Despite such large increase in the absolute amount of credit advanced, it is very interesting to see that the share of agricultural credit [refer Fig.3.2] in comparison to the total bank credit, by all scheduled commercial banks was decreasing to a large extent.

The same is the case in both long term as well as short term credit amount outstanding. The share of total short-term credit disbursement to agriculture and allied activities was above 10 percent till late 1980's. It gradually declined to a low of 6.1 percent in 1999-2000, just half the credit disbursed during ~~to~~ 1973-74. The share of long term credit outstanding showed a gradual decline from 19.2 percent in 1973-74, which remained above 15 percent till the late 1991, beyond which it fell sharply to 8.3 percent in 1999-2000.

The movement of credit-deposit ratio in the rural areas further reinforces the above trend (Figure 3.3 & Appendix II for data). Right through the 1970's till the end of 1980's the credit-deposit ratio in the rural sector had been increasing steadily. The trend has since reversed, and reached by the end of 1990's, what it was in the early 1970's. During the period 1969-71 the credit-deposit ratio in the rural areas was just 43.8 percent. It steadily increased to 66 percent in the mid 1980's, but since then there is gradual decline all through and reached 44.98 percent in the period 1997-98.

The trend of ratio of rural offices to total bank offices of all the scheduled commercial banks further indicates that the rural areas are prone to be neglected. The share of rural bank offices in the total bank offices of all the scheduled commercial banks jumped from 17.6 percent prior to nationalisation in 1969 to 36.1 percent in the period 1972-74. The share rose steadily thereafter, and attained a peak of 58.1 in 1990-92. Since then, there has been a gradual decline in the share of rural bank offices, and the share fell below 50 percent (49.3 percent) during the period 1998-2000. In fact the absolute number of bank offices fell in the mid 1990's. 2,706 rural bank offices were closed between March 1994 and March 2000, most of them in 1995 and 1996 (Ramachandran & Swaminathan, 2001).

Figure 3.3
Movement in Ratio of Credit to Deposits and Rural Bank Offices
(Three yearly average)



Note : The data for Rural Bank Branches during 1969, pertains only to that year i.e., 1969 and not a three year average.

Source : RBI, Basic Statistical Returns, Various Issues, 1969-2001 (Data in Appendix II)

Breaking up of the banking scenario into three phases according to its development and looking at the growth rates of the banking indicators in the rural sector makes the emerging bias against the rural areas more credible. The three phases to be taken into consideration are:

- 1973-1981, The period after nationalisation of banks and it was the early phase of green revolution phase.
- 1981-1991, The second phase which started in the late 70's and early 80's, where two major instruments of anti-poverty programs, viz., loan-cum-subsidy scheme targeted at the rural poor and state sponsored rural employment schemes such as IRDP in operation (Ramachandran & Swaminathan, 2001).
- 1991- till date, that is after liberalisation of the banking sector, following the report of the committee on the financial system chaired by Narasimham.

The three phases in banking policy are illustrated in Table.3.1, by a comparative analysis of growth rates of the rural population in India and growth rates of commercial banking. A relatively sharp increase in the number of rural and semi-urban bank offices and in the credit disbursed by them took place in the period 1973

to 1981. This expansion slowed down in the period 1981 to 1991, and declined sharply in the next period, 1991-1999. The same trends were true of total commercial bank credit to agriculture.

Table 3.1
Growth Rates of Rural Population, Rural Bank Offices, Rural & Agricultural Credit of Indian Scheduled Commercial Banks

Period	Rural Population	Rural Bank Offices	Credit From Rural Offices	Rural + Semi-urban Branches	Credit to Rural + Semi-urban Branches	Credit to Agriculture
1973-81	1.78	15.54	23.46	12.32	16.72	18.76
1981-91	1.84	7.15	9.97	5.95	7.91	6.64
1991-01	1.66	- 0.86	2.51	0.13	2.88	2.16

Source: RBI, Basic Statistical Returns, 1973-2001

Table 3.2
Distribution of Bank Credit in Rural Sector by Occupation

Occupation	1985	1993	1998
Agriculture	3726 (51.5)	11856 (39.0)	18127 (37.7)
Industry	1154 (16.0)	9544 (34.1)	12461 (25.9)
Transport	475 (6.6)	891 (2.9)	1599 (3.3)
Personal/Prof. Services	539 (7.4)	2614 (8.6)	5276 (10.9)
Trade	846 (11.7)	3752 (12.3)	7057 (14.7)
Financial Institutions	-	74 (0.2)	5276 (0.5)
Others	494 (6.8)	1651 (5.4)	2192 (4.5)
Total	7234 (100)	30384 (100)	48132 (100)

Source : RBI, Basic Statistical Returns, various issues

One may justify the shift in the institutional credit to priority sector in reluctance of the institutional credit agencies to extend the credit towards agriculture and allied activities. Table 3.2 indicates that, in 1985, nearly 52 percent of the funds deployed in rural areas went to agriculture. Industry accounted for 16 percent, trade 12 percent, and transport operators and small-scale industries (other than artisans and village industries) 7 percent each. About a decade later in 1993 the priority lending to agriculture sector went down drastically to 39 percent of the total priority sector lending. The credit to all other sectors have increased, especially it was channalised to industrial sector. Priority lending to the industrial sector increased heavily from 16 percent to 34 percent. The decreasing trend of lending to the agriculture sector did not

stop there but kept continuing. In 1998 the lending to agriculture further came down to 37.7 percent.

Table 3.3
Trends in Number and Amount Outstanding of Small Borrowal Accounts in All the Rural Financial Institutions

Year	Number of Accounts In lacks		Share of SBAs(%)	Amount Outstanding [In Rs. Crores]		Share of SBAs(%)
	All	SBAs		All	SBAs	
1984	295	282	95.5	43326	8897	20.5
1985	336	321	95.6	49995	10028	20.1
1986	388	371	95.8	56182	12615	22.5
1987	434	416	95.8	63727	15444	24.2
1988	480	459	95.6	71285	17954	25.2
1989	521	497	95.4	88027	22330	25.4
1990	539	512	95.0	104312	24147	23.1
1991	619	588	94.9	124203	27323	22.0
1992	659	625	95.0	136706	29945	21.9
1993	621	585	94.2	162467	32091	19.8
1994	596	558	93.6	175891	32188	18.3
1995	581	539	92.8	210939	34060	16.2
1996	567	519	91.6	254692	36252	14.2
1997	556	500	90.1	284373	37446	13.2
1998	535	468	87.4	329944	41095	12.5
1999	523	427	81.7	382425	38284	10.0
2000	543	392	72.2	460080	36408	7.9
2001	523	372	71.1	538433	37816	7.0

RBI, Basic Statistical Returns, 1984 – 2001

One could also look at the trend in small borrowal accounts (SBAs), which is defined as an amount borrowed in absolute terms below Rs 25,000/- (in single transaction), in order to assess the trend of credit offered by the formal banking institutions towards the poor and the rural areas. Here we can see that between 1984 and 1996 there was a clear shift in the share of the small borrowal account both in number as well as the amount outstanding. Table 3.3 exhibits this trend.

Starting from mid 1980's till 1992, 95 percentage of shares of the total number of accounts was small borrowal accounts. Over the years after financial sector liberalisation, it gradually declined and stood at a little more than 70 percent in 2001. Similarly the percentage share of the small borrowal amounts outstanding was 20.5 percent during 1984-85, it increased gradually, reached a peak of 25.4 percent during

1989-90 and further since then started drastically declining to reach a single digit of 7.0 percent during the year 2000-01. Now it is evident that the credit to agriculture and rural development by various formal financial institutions is declining drastically.

3.5 Trend of Banking Habits During the Period 1996-2001⁴

Apart from the small borrowal credit accounts and amounts, even the number of credit accounts overall is decreasing over the years and across the states. It can be seen from table 3.4 that on an average, over all India the credit account per 1000 population⁵ is also declining over the years. On an average, the number of credit accounts per thousand population has never gone above 56. There is a declining trend in the number of credit accounts per 1000 population. The all India average was 55 accounts per 1000 population in the year 1996, it gradually declined and came down to just 51 credit accounts per 1000 population by the end of year 2001.

A regional analysis shows that all the regions except for the northern region, the credit accounts per thousand populations have decreased over the years. A state level analysis reveals that the range of variation in credit account holdings is much wider. Where as the lowest being Assam, around 40 credit accounts per thousand populations, the highest is from Kerala, which has always been above 100. Except for a few states such as Haryana, Punjab, Chandhigarh, Delhi, Gujarat & Kerala, all other states show a downward trend of credit accounts per 1000 population over the years.

The states which come under the higher number of credit accounts per thousand populations are Harayana, Himachal Pradesh, Punjab, Chandigarh, Delhi, Tripura, Orrissa, Goa, Andra Pradesh, Karnataka, Kerala, Tamil Nadu, and Pondicherry. It is interesting to observe that most of these states which have contributed to a higher number of credit accounts per thousand population (on an average, more than 50) seem to be economically and socially developed states. So what determines the number of credit account holding per thousand population among the states ?

⁴ The data regarding deposit accounts, categorized on the basis of gender of the account holder is available only from the year 1996. For a comparison here the period of reference is taken from 1996.

⁵ For standardizing the number of deposit and credit accounts, the total population is taken into account since there is no age limit to hold an account. This method is followed every where in the whole of this thesis.

Table 3.4

State Wise Number of Accounts per 1000 Population, 1996 to 2001

States / Regions	Credit Accounts per 1000 Population						Deposit Accounts per 1000 Population					
	1996	1997	1998	1999	2000	2001	1996	1997	1998	1999	2000	2001
Northern Region	43.82	45.05	41.85	45.26	48.79	55.96	510.1	520.1	525.4	533.6	546.6	559.8
Haryana	45.28	45.22	41.93	43.78	50.18	51.04	465.6	467.4	477.0	482.9	500.5	506.2
Himachal Pradesh	43.21	46.04	44.97	56.18	58.32	57.33	588.9	593.1	605.1	625.3	640.5	647.2
Jammu & Kashmir	34.52	27.61	27.99	30.19	29.89	34.26	385.7	415.5	423.9	433.8	452.3	475.4
Punjab	55.37	57.44	51.22	56.86	64.01	66.60	743.1	754.0	763.9	782.2	793.3	791.6
Rajasthan	36.12	38.54	36.32	35.50	37.17	37.35	250.5	254.0	264.3	272.0	280.1	290.0
Chandigarh	72.77	87.30	70.17	104.34	165.39	189.81	1692.7	1746.0	1770.4	1853.6	1902.5	1797.1
Delhi	57.87	59.13	54.72	69.19	69.33	127.29	1208.3	516.9	1204.7	1189.1	1212.1	1278.8
North Eastern Region	42.44	41.59	39.90	33.79	33.77	27.53	279.2	288.8	280.1	285.4	269.9	273.0
Assam	38.01	38.18	36.12	28.53	27.33	23.95	278.2	296.0	301.7	299.3	290.9	291.7
Tripura	119.02	102.39	100.99	90.25	108.74	68.94	325.9	338.7	306.5	328.9	313.4	314.0
Eastern Region	55.34	49.85	49.41	41.47	43.11	36.90	298.0	307.8	306.0	307.8	311.4	321.4
Bihar	60.98	55.12	53.49	43.75	41.14	24.95	314.1	320.6	304.8	306.3	310.8	221.1
Orissa	76.80	65.40	66.68	59.44	64.70	54.43	227.6	241.0	242.7	250.3	252.9	267.2
Sikkim	38.23	36.51	35.20	27.75	31.45	25.90	220.2	218.3	235.0	236.6	231.3	247.9
West Bengal	58.44	54.13	54.00	44.93	49.86	42.78	413.5	428.5	438.7	438.8	443.1	453.0
Central region	38.81	38.45	36.27	34.45	34.92	35.74	285.4	316.3	326.2	330.7	333.3	349.7
Madhya Pradesh	52.41	51.58	47.05	43.05	44.65	36.08	324.5	327.2	332.4	327.9	332.0	268.7
Uttar Pradesh	40.73	40.46	38.76	37.41	37.55	35.88	359.5	368.2	381.5	390.0	392.5	381.8
Western Region	42.81	43.05	40.64	46.59	47.25	44.62	425.6	428.4	431.4	437.3	447.6	468.1
Goa	74.21	77.85	74.55	81.85	94.49	85.57	1559.5	1523.1	1563.2	1621.2	1685.3	1776.8
Guarat	39.37	41.22	40.36	39.37	42.12	43.01	388.2	400.8	408.5	413.9	429.2	451.4
Maharashtra	44.17	43.55	40.37	49.82	49.25	44.95	428.5	426.9	426.6	432.5	439.6	458.2
Southern Region	91.21	91.76	89.36	88.93	93.43	88.40	464.4	458.1	460.6	470.2	482.6	499.9
Andhra Pradesh	86.38	87.02	82.36	84.22	86.64	82.54	344.1	351.4	358.6	372.4	388.9	406.3
Karnataka	82.23	83.82	79.51	82.11	96.50	84.14	480.9	473.1	470.4	477.2	487.9	513.1
Kerala	105.61	111.07	114.23	108.61	111.47	116.21	617.9	616.9	632.6	641.5	645.8	645.5
Tamil Nadu	97.43	94.44	93.63	90.35	89.94	84.96	517.0	492.6	486.0	493.9	505.6	525.3
Pondicherry	91.37	93.44	88.51	97.55	95.50	90.36	599.7	614.1	654.1	634.9	672.6	691.1
All India	55.28	54.25	52.26	51.02	53.03	51.07	382.4	386.8	390.2	395.9	402.6	417.5

Source : RBI, Basic Statistical Returns, 1996 to 2001

The credit account holding in formal banks is conditional on the deposit account holding. For holding a credit account, whether it is an individual or a group (SHG), they should be a member of the bank. Most important is that an individual or group can be a member of that particular bank only on the condition that they possess the deposit account of the same bank (see Figure 3.4). Saving deposits enable bankers to have a window on depositor's saving capacity, which is a good basis for determining their debt capacity. By opening deposit accounts, depositors have a certain degree of confidence in their financial institution, which also gives them incentive to behave responsibly as borrowers when deposits are provided voluntarily. It is said that, successful deposit taking banks that lend to the poor tend to have many more depositors than borrowers (Pischke et al, 1996). Hence the trend of deposit accounts has a major role to play in analysing the trend of credit accounts. Let us have look at the trend of overall deposit accounts.

Table 3.4 also traces out the trend of overall deposit accounts per 1000 population, state wise. One can observe in the table that on an average for the whole of India, the total number of deposit accounts per 1000 population is increasing over the years. In the year 1996 the all India average number of deposit accounts per 1000 population was just 382. Over the years it increased gradually, went up to 395 in the year 1999 and by the end of 2001 the average number of deposit accounts per 1000 population was as high as 418. Among the states, except for few north east Indian states such as Assam and Tripura, which showed a fluctuating trend, all other states had an increasing trend of deposit accounts per 1000 population.

It is interesting to see that few states have put up remarkable figures of number of deposit accounts per 1000 population. It can be seen from the table that states such as Chandigarh, Delhi and Goa have more than 1000 deposit accounts per 1000 population. A possible reason is that many people have more than one bank deposit account.

Another striking feature appears when the number of deposit accounts per 1000 population is analysed on the basis of gender of the account holder. Banking Statistics, till 1995 gives the information on deposits and credit (Number of Accounts as well as amount) of all scheduled commercial banks according to states. But from the year

1996, the Banking Statistics issues have subdivided the deposits according to ownership category viz., Individuals – Male & Females [table 3.5]. So one has got the scope to analyse as to what is the trend and pattern of individual deposit accounts of scheduled commercial banks in various states and regions.

Figure 3.4
Flow Chart Indicating the Procedure for Access to Formal Credit

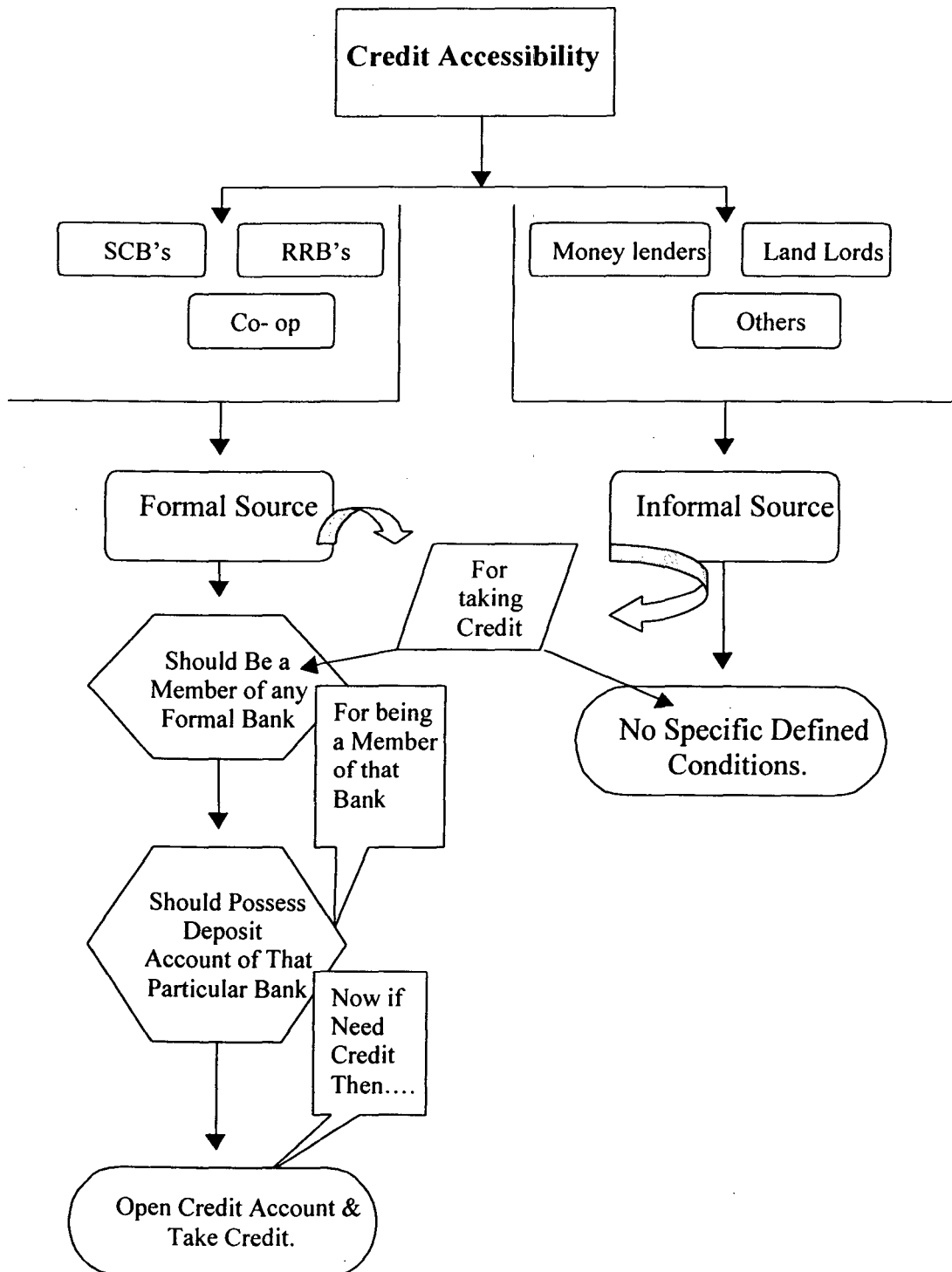


Table 3.5
State Wise Number of Deposit Accounts per 1000 Males / Females, 1996 to 2001

States / Regions	Deposit Accounts per 1000 Males						Deposit Accounts per 1000 Females					
	1996	1997	1998	1999	2000	2001	1996	1997	1998	1999	2000	2001
Northern Region	794.5	776.4	764.55	757.88	751.37	737.29	269.8	280.4	289.3	295.7	303.3	308.1
Haryana	736.6	708.0	710.37	708.07	683.80	675.07	244.4	260.0	261.6	269.7	283.4	271.0
Himachal Pradesh	856.1	799.7	802.70	804.47	785.54	866.01	304.0	333.3	324.2	330.3	339.4	383.3
Jammu & Kashmir	630.5	652.5	635.93	637.24	656.00	641.63	200.6	218.8	231.7	232.2	226.8	262.5
Punjab	1110.6	1079.0	1071.21	1079.25	1060.83	1010.17	402.9	438.7	453.7	471.4	484.4	486.3
Rajasthan	420.1	411.5	419.26	423.35	421.69	412.40	106.7	110.9	118.0	123.7	127.9	130.9
Chandigarh	2555.0	2356.7	2335.51	2446.09	2445.59	2256.88	1073.1	1266.1	1190.9	1165.8	1124.7	1036.4
Delhi	1797.9	1762.5	1621.34	1510.07	1466.85	1534.86	755.1	639.9	712.9	694.7	700.3	766.3
North Eastern Region	446.9	447.9	421.60	425.22	381.66	384.40	124.1	128.4	123.4	123.3	121.1	127.8
Assam	448.4	465.8	464.31	459.22	426.89	417.33	117.5	124.6	126.3	123.5	125.9	128.9
Tripura	470.9	477.9	410.10	425.50	386.51	446.17	131.9	138.2	126.5	131.8	123.5	155.6
Eastern Region	494.4	508.3	496.89	492.39	481.60	476.70	135.6	134.7	135.2	137.0	142.9	136.8
Bihar	416.4	421.2	397.15	392.23	385.23	326.83	115.4	112.5	104.3	103.7	105.8	96.6
Orissa	390.7	407.3	400.09	409.13	400.76	411.55	76.9	82.0	88.8	92.6	97.5	102.9
Sikkim	342.4	315.8	316.36	302.82	315.07	364.31	104.8	117.6	129.0	132.3	112.4	99.1
West Bengal	639.1	663.4	666.41	657.00	640.98	666.44	188.5	187.0	195.4	199.3	210.4	194.0
Central region	495.9	498.6	499.90	498.94	479.80	495.22	148.7	148.3	155.6	157.3	165.3	170.3
Madhya Pradesh	385.1	395.6	387.01	380.27	362.92	387.01	110.0	92.4	97.0	95.1	110.3	123.1
Uttar Pradesh	546.9	546.0	551.92	553.48	533.32	535.06	167.6	175.6	184.1	187.4	191.7	191.1
Western Region	657.9	648.1	640.14	628.94	623.56	625.21	215.3	219.4	223.5	236.9	247.5	250.7
Goa	1926.1	1814.6	1739.71	1671.81	1774.72	2160.10	957.8	920.2	965.0	1011.7	953.6	1236.4
Guarat	604.1	616.9	623.44	607.95	605.52	622.32	170.6	170.5	173.7	190.1	202.4	222.3
Maharashtra	666.2	645.2	629.70	622.23	613.25	606.03	226.2	233.0	236.7	247.9	258.5	250.8
Southern Region	690.2	660.9	652.17	654.22	652.23	670.67	243.9	249.8	253.4	263.5	273.7	283.6
Andhra Pradesh	532.4	532.5	536.29	545.24	549.36	570.30	159.3	165.1	169.7	183.0	197.5	205.6
Karnataka	724.3	689.6	671.39	665.85	655.42	682.37	257.9	265.7	264.7	274.7	287.2	296.8
Kerala	885.0	854.2	862.37	856.89	844.20	842.99	367.4	381.0	389.3	402.4	406.8	410.5
Tamil Nadu	752.1	692.4	667.50	672.17	674.35	694.66	268.3	268.1	271.7	277.3	282.6	298.4
Pondicherry	888.4	842.3	843.93	807.84	784.03	906.09	262.5	294.0	309.6	286.5	330.4	400.3
All India	598.3	591.8	584.01	580.81	569.71	574.96	191.8	195.1	199.2	205.0	212.8	215.6

Source : RBI, Basic Statistical Returns, 1996 to 2001

The analysis reveals that, on an average for the whole of India by the end of the year 2001 there are nearly 575 deposit accounts accruing to males, per thousand males which is above the national average of overall deposit accounts per thousand population which is 417. However over the years this trend has been declining. In the year 1996, the number of deposit accounts per 1000 males was as high as 598 but it gradually declined and came to a low of 575 by the end of year 2001. But on the other hand the number of deposit accounts per thousand females is increasing over the years. In the year 1996 there were only 192 deposit accounts per 1000 females but it gradually increased to 205 in the year 1999 and went up to 216 accounts per 1000 females by the end of year 2001. Though in absolute terms the deposit accounts per thousand males is much higher than that for female's, it is quite interesting to see that the deposit accounts per thousand males is decreasing but deposit accounts per thousand females is increasing over the years. What is the reason for such a trend taking place ?

So whatever increase in the trend of number of deposit accounts per 1000 population observed overall is on account of increase in the trend of deposit accounts per 1000 female. Since in India almost all the SHG members under the micro-credit programmes are females, could it be attributed to them ? Is there any relation between micro-credit and this observed trend ? Before testing the relationship we shall briefly discuss the emergence and Indian experience with micro-credit programmes.

3.6 Indian Experience with Micro-Credit Programs

With reference to micro-finance in India, given the background of incapacity or disinterest of the formal banking sector to serve the needs of the low income clientele, though there is increased demand for credit from the rural households, how can the gap between demand and supply of funds in the rural economy be bridged? What mechanisms could be used for this ? Interestingly the formal sector took the initiative to develop a supplementary credit delivery mechanism by encouraging institutional arrangement outside the financial system like SHGs through non-governmental organisations to act as facilitators or intermediaries. The beginning was made with NABARD's pilot project in Karnataka (1986-87) of linking SHG's with the formal banks, mediating through NGO's (Tara, 1999). This project known as the SHG-Bank linkage project was expected to be advantageous to the banking sector from both angles

of fulfilment of social goals (like reaching out the poor) and achieving operational efficiency (by externalising part of their transaction cost).

The improvement in the SHG- Bank linkage program is seen in table 3.6. In the initial period in 1992-93, just 255 SHG's were linked to Banks with Rs 2.89 million as refinance from NABARD, in a span of couple of years, in 2000-01 it rapidly expanded linking 234843 SHG's refinancing of Rs 4007.46 million. If we see the state wise outreach, then the SHG Bank linkage program covered 412 districts in 25 states and 2 union territories.

Table 3.6
Growth of SHG-Bank Linkage Program [1992 – 2001]

Year	Cumulative	
	No. of Groups	Amount of Loan (Rs. in Million)
1992-93	255	2.89
1993-94	620	6.53
1994-95	2122	24.45
1995-96	4757	60.58
1996-97	8598	118.36
1997-98	14317	237.95
1998-99	32995	520.60
1999-00	114775	1501.26
2000-01	234843	4007.46

NABARD, NABARD & micro-finance, 2000 – 01

In the table 3.6, the growth of SHGs over the years was discussed. In table 3.7 we can observe the growth rates of SHGs and SHGs per 1000 females across the states during the period 1998-99 to 2000-01. This table reveals that though all listed states have got a positive growth rate of SHGs, there is wide variation among the states in respective growth rates. States such as Andaman & Nicobar, Gujarat, Karnataka, kerala, Orrissa, & Uttarpradesh comparatively have a lower growth rates, below 100, where as the other states excel having a growth rate of SHGs above 100.

But it is not necessary that the states, which have a lower growth rate, will have a lower number of SHGs. The states with lower growth rates might have begun their SHG-bank linkage program at an earlier stage, such that it already has sufficient

linkages and further linking is quite difficult. Hence most of these states with lower growth rate will have a lower number of SHGs linked in the recent years compared to the states which have a high growth rate.

For example, we can observe from the table that, by the end of year 2001 Kerala has got 1826 SHGs linked to banks but still its growth rate is just 19. Where as Goa has comparatively very less number of SHGs linked to banks (27) in the same period, but its growth rate is as high as 160. So one has to be careful in deriving inferences from this table. In the same table the growth rate of SHGs per 1000 females, a co-variate of growth rate of SHGs is also given. We can observe that there is a similar trend such as that of growth rate of SHGs.

Table 3.7
Growth Rates of SHGs & SHGs per 1000 Females across the States
(1998 – 2001)

States	Growth of SHGs Over the Years			Growth Rate	Growth of SHG/1000 Female Over the Years			Growth Rate
	1998-99	1999-00	2000-01		1998-99	1999-00	2000-01	
Andaman & Nic.	3	9	10	82.57	0.018	0.051	0.061	86.84
Andhra Pradesh	6579	29242	84939	259.31	0.179	0.786	2.258	255.39
Assam	10	46	156	294.97	0.001	0.004	0.012	288.79
Bihar	121	857	1846	290.59	0.003	0.018	0.046	324.17
Goa	4	14	27	159.81	0.005	0.018	0.041	180.97
Gujarat	879	1345	1375	25.07	0.038	0.057	0.059	24.70
Haryana	4	107	334	813.78	0.000	0.012	0.034	783.19
Himachal Pradesh	133	48	1166	196.09	0.041	0.014	0.390	210.24
Jammu & Kashmir	2	53	137	727.65	0.000	0.011	0.029	725.62
Karnataka	2002	3167	5627	67.65	0.079	0.124	0.217	65.51
Kerala	1291	1709	1826	18.93	0.079	0.104	0.112	18.59
Madhya Pradesh	461	1533	3174	162.39	0.012	0.040	0.110	200.29
Maharashtra	1058	3029	5509	128.19	0.024	0.069	0.119	121.14
Orrissa	975	2021	3850	98.71	0.056	0.114	0.213	95.49
Pondicherry	15	144	150	216.23	0.028	0.257	0.308	233.26
Punjab	1	18	71	742.61	0.000	0.002	0.006	728.69
Rajasthan	465	526	2513	132.47	0.019	0.021	0.093	123.84
Tamil Nadu	2618	7671	16676	152.38	0.087	0.251	0.541	149.99
Uttar Pradesh	1464	7744	5457	93.07	0.019	0.097	0.069	92.59
West Bengal	554	2317	5351	210.79	0.015	0.061	0.138	205.40
All India	18639	61600	140194	173.97	0.039	0.128	0.283	167.91

Source: NABARD, NABARD & micro-finance, 2000 – 01

A look at the regional spread of SHGs [Table 3.8] gives the impression that, despite good overall progress, the southern region continued to lead the other regions in performance under the SHG linkage program scheme. Its share in the total achievement, increased from 67 percent during 1999 to 73 percent in 2000-01. North & North-eastern states shares are comparatively negligible with 3 and less than 1 percent in the total share respectively.

By way of linking SHGs with formal banks, both the banks as well as SHGs will be benefited. Involvement of SHGs with banks could help in overcoming the problem of high transaction cost in providing credit to poor by passing on some of the banking responsibilities regarding loan appraisal, follow-up, recovery etc to the poor themselves. In addition to that, the character of SHGs and the relation with their members offer way for overcoming the problem of collateral, excessive documentation and physical access. By this, banks gain from the new risk free credit market and a potential surplus sector (SHGs) and at the same time the SHGs enjoy the advantage of much larger and cheaper resource (Dasgupta, 2001). However the SHGs have to open a deposit account in the bank to get cheaper loans from the banks under micro-credit program.

Table 3.8
Region Wise Spread of SHG-Bank Linkage Program During the Last 3 Years

Region	% share in SHG-bank linkage (cumulative) as on		
	March 1999	March 2000	March 2001
Northern	3	2	3
North-Eastern	<1	<1	<1
Western	10	8	6
Eastern	10	9	8
Central	11	13	9
Southern.	65	67	73
Total	100	100	100

Source: NABARD, NABARD & micro-finance, 2000 – 01

With this knowledge on formal banking habits and micro-credit SHGs at a national level, let us examine whether there exist any relationship between the number of SHGs per 1000 females and number of deposit accounts per 1000 females. It gives the incentive to proceed further in testing the impact of micro-credit SHGs on banking habits of individuals and households.

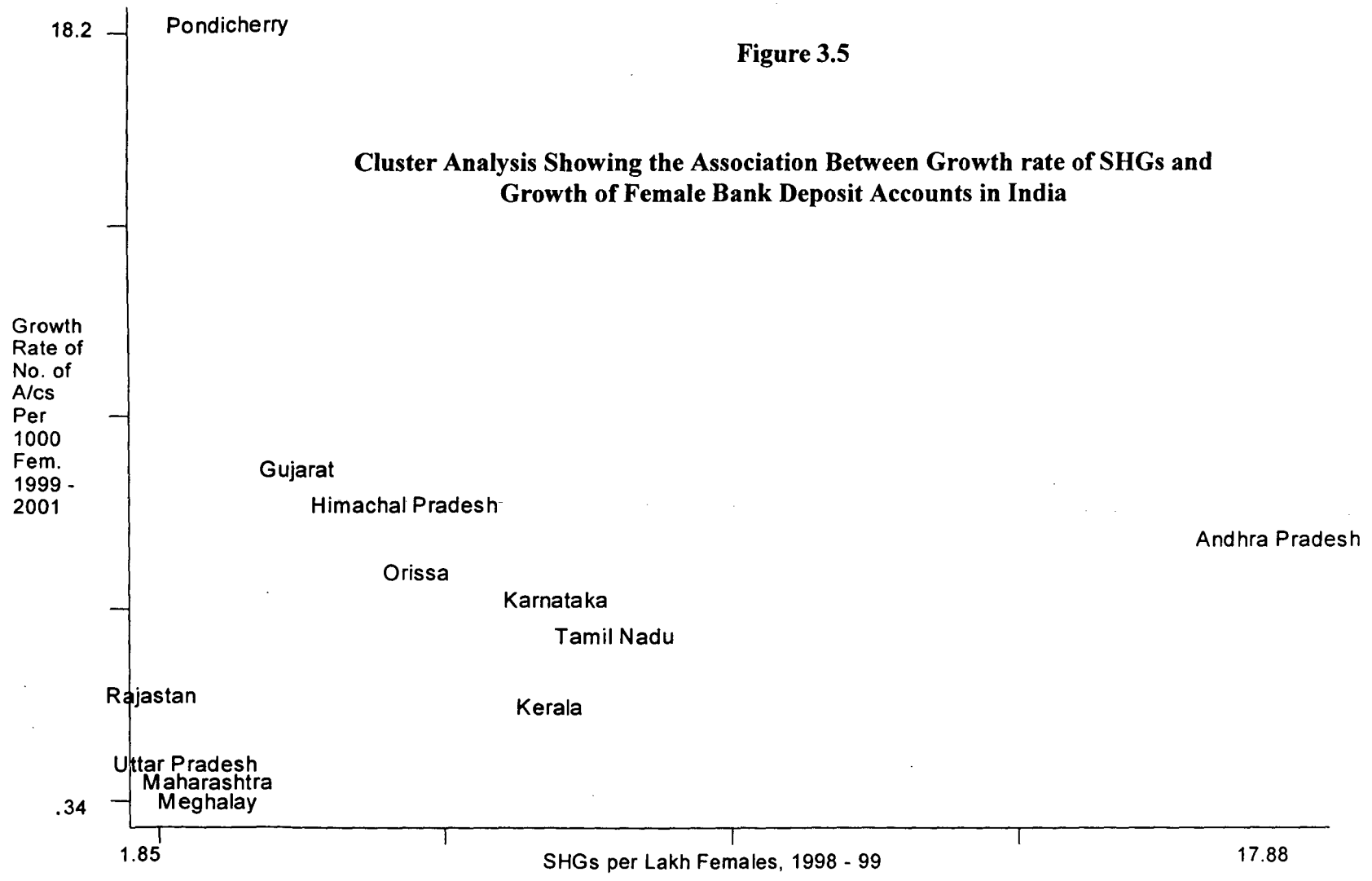
3.7 Relationship Between Growth of SHGs and Bank Deposit Accounts

By close observation we can see that the growth rate of accounts per 1000 females and SHG per 1000 females are moving together. So there might be a close relationship between growth of SHGs and the number of bank accounts held by the females. Hence, it is necessary to support this argument empirically. But a bias might creep in, if we are taking growth rate of SHGs per thousand females as such to associate with growth rate of bank deposit accounts per thousand females in each state. This is because those states, which started the SHG-bank linkage program earlier would be having an overall low growth rate, and those states which started the program at a later stage would be having a high growth rate (Refer table 3.7).

To minimise this bias, the initial period (1998-99), for which the state wise data is available on SHG-bank linkage program, is taken and split into two categories on the basis of the median of the series to take only those states which had considerable number of SHGs per 1000 females to be associated with growth rate of number of bank accounts per 1000 females. The median of the series happens to be 0.018 and therefore those states which had SHGs per 1000 female greater than 0.018 have been taken into analysis.

And for these states the association between the percapita number of SHGs in the year 1998-99 and the growth rate of percapita accounts held by female (1996-2001) state wise⁶ is a positive. (See Fig.3.5) The states which have lower number of SHGs per thousand females in the initial stages, such as, Rajasthan, Meghalaya, UP & Maharashtra also had a lower growth rate of number of bank accounts per thousand females and on the other hand those states which had a higher percapita number of SHGs per thousand females in the initial stages such as Tamil Nadu, Karnataka, Kerala, Orissa, etc., had a higher growth rate of number of bank accounts per thousand female population.

⁶ The state wise data for number of SHGs linked with banks is available only from 1998-99 onwards in the NABARD publication , NABARD & Micro-Finance.



With this association at a macro level, it is necessary for us to test this relationship between SHG membership and bank account holdings of females with the help of micro-level data. As we have found that, on an average for every thousand population there are only around 400 deposit accounts and there being wide disparities among states in percapita deposit accounts, what determines the percapita account holdings? What percentage of the population has relationship with banks ? Which segment of the population are they ? Who are the excluded ones ? Does the micro-credit program reduce this exclusions ? If so in what way ?

Since the available secondary data is not sufficient for answering these questions, it is necessary to analyse the banking habits and its determinants at a micro-level through an appropriate primary survey. Further, the other impacts of micro-credit programmes have to be analysed to answer some the questions that arose in this discussion and to know the impact of micro-credit programmes on banking habits. In response to this, chapter IV deals with the analysis of micro level survey data.

CHAPTER IV

ANALYSIS OF DETERMINANTS AND IMPACT OF MICRO-CREDIT SHGs ON BANKING HABITS

4.1 Introduction

The foregoing chapter addressed the trends in individual deposit and credit accounts over the period 1996 to 2001. It was observed that though deposit accounts per thousand males are decreasing, the overall number of deposit accounts per thousand population is increasing. On the other hand, though the proportion of deposit accounts per thousand females is far less than that of the male counterpart the deposit accounts per thousand females is increasing over the same period viz., 1996-2001. Hence we came to a conclusion that the increase in overall deposit accounts is attributed to the increase in accounts of the females. Further it was found that there is a significant positive association between growth rate of percapita female deposit accounts and growth of SHGs per thousand females at a macro-level. This chapter tries to test this observed positive association between the above mentioned variables at a micro-level. In the course of analysis, this chapter also tries to trace out the banking habits and its determinants both at household and individual level.

The present chapter is organized in five sections. Section 4.2 describes the profile of the sample villages in terms of social and economic aspects such as composition of religion, caste, educational status, occupational structure, income groups and house types. Section 4.3 traces out the banking habits and its probable determinants at household level, while section 4.4 tries to do a similar excise at individual level. Section 4.5 traces the impact of micro-credit SHGs on individual and household banking habits. Finally section 4.6 summarises and concludes the chapter.

4.2 Profile of the Sample Villages

Before going to the core of analysis, we shall first look at the social and economic structure of the sample villages to have a better understanding of the sample villages. Table 4.1 shows the distribution of population on the basis of caste and religion in each village. It can be observed that 97 percent of the total households in both the villages are Hindus. Rest of the two religions, viz., Christians and Muslims, share the

remaining three percent of the households. Both the villages are similar in terms of the religion of the households, but there is a clear difference as far as the caste composition is concerned. Nearly 44 percent of the total households belong to SC community in Pottapatty, but in Kavarayapatty the strength of this community is comparatively smaller, with just 20 percent of the households belonging to SC community. However 91 percent of the total households in each village are male-headed households.

Table 4.1
Distribution of Households According to Religion & Caste of
Head of the Household

Religion	Caste				Total
	SC	MBC	BC	GEN	
Kavarayapatty					
Hindu	21 (21.0) [20.4]	45 (45.0) [43.7]	30 (30.0) [29.1]	4 (4.0) [3.9]	100 (100) [97.1]
Christian	0 (0.0) [0.0]	1 (50.0) [0.97]	1 (50.0) [0.97]	0 (0.0) [0.0]	2 (100) [1.9]
Muslim	0 (0.0) [0.0]	0 (0.0) [0.0]	0 (0.0) [0.0]	1 (100) [0.97]	1 (100) [0.97]
Total	21 (20.4)	46 (44.7)	31 (30.1)	5 (4.9)	103 (100)
Pottapatty					
Hindu	50 (45.0) [43.9]	44 (39.6) [38.6]	15 (13.5) [13.2]	2 (1.8) [1.8]	111 (100) [97.4]
Christian	0 (0.0) [0.0]	0 (0.0) [0.0]	0 (0.0) [0.0]	0 (0.0) [2.6]	0 (100) [0]
Muslim	0 (0.0) [0.0]	0 (0.0) [0.0]	0 (0.0) [0.0]	3 (100) [0.0]	3 (100) [2.6]
Total	50 (43.9)	44 (38.6)	15 (13.2)	5 (4.4)	114 (100)

Note1: Figure in normal brackets indicates percent to total of each religion

Figures in square brackets shows the percent to total households in respective village

Note2 SC = Scheduled Caste, MBC = Most Backward Caste, BC = Backward Caste, GEN = Others

Source: Primary Survey Data

Education being one of the important aspects of growth, development and exposure, it is very low in both the villages. Here the numbers of years of education is classified into five divisions¹. Those who have not got any formal education at all are classified as uneducated, one to seven years of schooling is classified as primary education, eight to ten years of schooling as secondary, ten to twelve as higher secondary &

¹ The classification is on the basis National Educational Policy, Dept. of Education, Govt. of India. However for convenience, Primary (1 – 5 years) and Middle (6-8 years) have been clubbed and categorised as Primary (1-8 Years). Refer Website <http://www.education.nic.in>. For analysis of educational level, only population of age 5 years & above has been taken into consideration, since the minimum age in India for starting formal education is 5 years.

above that is those who have gone above higher secondary. Table 4.2 shows that, in both the villages the educational level of all people above the age of five, as well as head of the households is quite low. But comparatively Pottapatty village has performed better in education than Kavarayapatty. Both the statistics, viz., the proportion of population without any formal education as well as the percentage of population with formal education are favorable to Pottapatty. The uneducated are lower in Pottapatty (23.0 percent) compared to 27.5 percent in Kavarayapatty. Also the average number of years of schooling per person is higher in Pottapatty than in Kavarayapatty, as one can see that there are much higher proportion of individuals as well as household heads who have got formal education for eight & more years (Secondary and above according to Indian educational literature).

Table 4.2
Distribution of Population by Level of Education²

Village	Educational Qualification					Total
	Uneducated	Primary	Secondary	Higher Sec.	Above Hig.Sec	
Kavarayapatty	122 (27.5)	164 (37.0)	102 (23.0)	40 (9.0)	15 (3.4)	443 (100)
HH_ Heads	44 (42.7)	32 (31.1)	20 (19.4)	3 (2.9)	4 (3.9)	103 (100)
Pottapatty	112 (23.0)	164 (33.7)	116 (23.9)	66 (13.6)	28 (5.8)	486 (100)
HH_ Heads	41 (36.0)	31 (27.2)	23 (20.2)	10 (8.8)	9 (7.9)	114 (100)
Total	234 (25.2)	328 (35.3)	218 (23.5)	106 (11.4)	43 (4.6)	929 (100)
HH_Head Total	85 (39.2)	63 (29.0)	43 (19.8)	13 (6.0)	13 (6.0)	217 (100)

Note 1: Figures in parenthesis are percentages of respective counts

Note 2: Here only population above the age of 5 years have been taken into consideration

Source: Primary Survey Data

Pottapatty has a higher proportion of SC population with formal education compared to Kavarayapatty which is revealed in Table 4.3 Also there are more proportion of SC people having formal education for eight & more years, exhibiting the average number of years of education of SC community people in Pottapatty is higher than that of Kavarayapatty. So the educational level of SC community is also better in Pottapatty in comparison to Kavarayapatty, along with a better educational performance overall.

² 0 years of formal education = Uneducated, 1 to 7 years = Primary, 8 to 10 years = Secondary, 11 to 12 years = Higher secondary, more than 12 years = Above 12 years.

Regular salaried and the self-employment are understood to be economically more rewarding. The association shows that these two kinds of occupation fetch more income and most of them in this occupation category seem to possess atleast one bank account. Since SC community is understood to be socially and economically backward, an insight into the employment structure of this community showed that Pottapatty is better compared to the other village. Table 4.4 shows that the proportion of SC population with regular salaried being almost the same in both the villages, Pottapatty has a higher share of self-employed people in this community (13.9) when compared to Kavarayapatty, wherein the respective share of self-employed people belonging to SC community is 6.8 only. However the share of each occupation to the total employment status in respective villages happen to be almost similar. This means that unlike Kavarayapatty, where most of the opportunities of self-employment is utilised by other caste people, in Pottapatty the SC community people have grabbed more opportunities of self-employment.

Table 4.3
Distribution of Population by Their Caste & Educational Status

Education	Caste				Total
	SC	BC	MBC	GEN	
Kavarayapatty					
Uneducated	27 (26.7)	47 (32.1)	44 (40.9)	4 (19.0)	122 (27.5)
Primary	40 (39.6)	65 (35.3)	51 (37.2)	8 (38.0)	164 (37.0)
Secondary	24 (23.8)	39 (21.2)	34 (24.8)	5 (23.8)	102 (23.0)
Higher Sec.	8 (7.9)	22 (11.9)	7 (5.1)	3 (14.3)	40 (9.0)
Above Hig. Sec	2 (1.9)	11 (5.9)	1 (0.7)	1 (4.8)	15 (3.4)
Total	101 (100)	184 (100)	137 (100)	21 (100)	443 (100)
Pottapatty					
Uneducated	43 (18.9)	51 (29.5)	13 (22.0)	5 (20.8)	112 (23.0)
Primary	88 (38.8)	47 (27.2)	21 (35.6)	8 (33.3)	164 (33.7)
Secondary	57 (25.0)	42 (24.3)	12 (20.3)	5 (20.8)	116 (23.9)
Higher Sec.	34 (10.5)	22 (12.1)	7 (11.9)	3 (12.5)	66 (13.6)
Above Hig. Sec	8 (3.5)	11 (6.4)	6 (10.2)	3 (12.5)	28 (5.8)
Total	228 (100)	173 (100)	59 (100)	24 (100)	486 (100)

Note: Figures in Parenthesis refers to the proportion of respective counts to total with in Caste
Source: Primary Survey Data

Coming to the economic status of the people in both the villages, it is very clear from table 4.5 that 41 percentage of households in Kavarayapatty and 61 percent of households in Pottapatty have only the minimum homestead land of 1 to 5 cents. They

don't have any other land assets for cultivation and have to totally depend on employment opportunities outside. Kavarayapatty is well off compared to the other village. Kavarayapatty has a higher percentage of households having land assets for the purpose of cultivation, ranging from 0.06 acres and 2.5 acres, other than their homestead land. The households with no land assets other than the minimum homestead land (1-5 cents) are more in proportion in Potapatty (61.4 percent) whereas in Kavarayapatty this group consists of only 40.8 percent. So in the landholding status of households, Kavarayapatty has an absolute advantage over Potapatty.

Table 4.4
Distribution of Population by Caste & Occupation Status^{*1}

Education	Caste				Total
	SC	BC	MBC	GEN	
Kavarayapatty					
Unemployed	33 (45.2)	66 (42.0)	30 (30.33)	8 (47.1)	137 (39.6)
Regular Salaried	4 (5.5)	16 (10.2)	4 (4.0)	1 (5.9)	25 (7.2)
Wage Labour	12 (16.4)	15 (9.6)	13 (13.1)	2 (11.8)	42 (12.1)
Agricultural Lab.	19 (26.0)	37 (23.6)	41 (41.4)	5 (29.4)	102 (29.5)
Self - Employed	5 (6.8)	23 (14.6)	11 (11.1)	1 (5.9)	40 (11.6)
Total	73 (100)	157 (100)	99 (100)	17 (100)	346 (100)
Pottapatty					
Unemployed	69 (39.9)	62 (46.6)	26 (52.0)	10 (55.8)	167 (44.7)
Regular Salaried	10 (5.8)	12 (9.0)	6 (12.0)	2 (11.1)	30 (8.0)
Wage Labour	25 (14.5)	17 (12.8)	5 (10.0)	0	47 (12.6)
Agricultural Lab.	45 (26.0)	29 (21.9)	9 (18.0)	3 (16.7)	86 (23.0)
Self - Employed	24 (13.9)	13 (9.8)	4 (8.0)	3 (16.7)	44 (11.8)
Total	173 (100)	133 (100)	50 (100)	18 (100)	374 (100)

Note: Figures in Parenthesis refers to the proportion of respective counts to total with in Caste
Source: Primary Survey Data

Table 4.5
Distribution of Households According to Possession of Land Assets

Village	Land Assets (in Acres)			Total
	0.01 - 0.05	0.06 - 2.50	Above 2.50	
Kavarayapatty	42 (40.8)	37 (35.9)	24 (23.3)	103 (100)
Pottapatty	70 (61.4)	25 (21.9)	19 (16.7)	114 (100)
Total	112 (51.6)	62 (28.6)	43 (19.8)	217 (100)

Note: Figures in parenthesis are percentages of respective counts
Source: Primary Survey Data

Both the villages have a very high percentage of dependent population³, on an average 57.7 percentage. These two villages are predominantly agriculture-based areas. Agriculture provides major income and employment opportunities for a higher percentage of their respective population (Table 4.6). The distribution of households according to occupation of working population alone, in Kavarayapatty shows nearly 49 percent of them are involved in agriculture followed by wage labour, self employed and very small percentage of people are involved in regular salaried group. The case is same with Pottapatty too. 42 percentage of their working population comes under the purview of Agriculture.

Table 4.6
Distribution of Population According to Occupation

Village	Dependent Population **	Occupation # #				
		Regular Salaried	Wage Labour	Agriculture Labour	Self Employed	Total # #
Kavarayapatty	260 (55.3)	25 (11.9)	43 (20.5)	102 (48.6)	40 (19.0)	210 (100)
Pottapatty	308 (59.8)	30 (14.5)	47 (22.7)	86 (41.5)	44 (21.3)	207 (100)
Total	586 (57.7)	55 (13.2)	90 (21.6)	188 (45.1)	84 (20.1)	417 (100)

Note: * * Figures in parenthesis implies proportion of dependents to total population of respective village. # # Figures in Parenthesis implies proportion of each occupation to working population only
Source: Primary Survey Data

Table 4.7
Distribution of Houses by quality / Type Assessed on the Basis of Cut off Points

Village	House Type							Total
	0	1	2	3	4	5	6	
Kavarayapatty	17 (16.5)	10 (9.7)	33 (32.0)	20 (19.4)	11 (10.7)	6 (5.8)	6 (5.8)	103 (100)
Pottapatty	32 (28.1)	8 (7.0)	36 (31.6)	15 (13.2)	3 (2.6)	6 (5.3)	14 (12.3)	114 (100)
Total	49 (22.6)	18 (8.3)	69 (31.8)	35 (16.1)	14 (6.5)	12 (5.5)	20 (9.2)	217 (100)

Note: Figures in parenthesis are percentages of respective counts to total.
Source: Primary Survey Data

The type of house possessed by each household will add more information to the prevailing economic status of the people in both the villages. To assess the type / quality of houses, six indicators have been used. The indicators happen to be (1) Type of roof, (2) Type of floor, (3) Type of toilet, (4) Source of drinking water, (5) Number

³ Dependent population are those who don't have any source of income and they depend on others for their livelihood.

of rooms, and (6) Electrification. Each one of the indicators has been given a cut off point below which it is identified inferior / worse off and given mark " 0 ". If the value of the indicator is found to be above the cut off then it is identified as better off and assigned a mark of "1". The summation of all these points accruing to the above mentioned house type indicators reveals the type or quality of house pertaining to each household. Table. 4.7 show various qualities of houses ranging from 0 to 6 points.

The category " 0 " indicates that there are not even one better off quality aspect out of those housing type indicators defined, and on the other hand category " 6 " denotes that the particular household has better off quality of all the above mentioned house type criteria. According to table 4.7, 32 percent of households in both the villages have houses, which deserves just 2 points out of 6 points. A striking feature is that Pottapatty has a bimodal distribution with reference to type of house possessed i.e., the proportion of those who have house type '0' as well as house type '6' are comparatively higher in Pottapatty, 28.1 and 12.3 respectively, where as in Kavarayapatty, the concentration of house type is in the middle. This indicates that most houses are moderate in Kavarayapatty, but in Pottapatty most houses are either very sophisticated or very poor. So apart from land holding status, Kavarayapatty is better off with respect to type of houses possessed also, in comparison to Pottapatty.

Table 4.8
Distribution of Households According to Percapita Income

Village	Per capita Income (In Rupees per Month)			Total
	100 to 350	351 to 750	Above 750	
Kavarayapatty	52 (50.5)	42 (40.8)	9 (8.7)	103 (100)
Pottapatty	63 (55.3)	36 (31.6)	15 (13.2)	114 (100)
Total	115 (53.0)	78 (35.9)	24 (11.1)	217 (100)

Note: Figures in parenthesis are percentages of respective counts to total.

Source: Primary Survey Data

Another important indicator of people's economic status is the per capita income⁴ of the households. For convenience the per capita income is classified into three major groups viz., Group 1 comprises of those households who fall within a per capita income range of Rs100 to 350, group 2; Rs351 to 750 and group 3 consists of those

⁴ Per capita income is calculated as total income earned by all the family members divided by number of members in the respective families.

households who fall in the category of above Rs750. From table 4.8 we can see that most of the households, almost half of them in Kavarayapatty and lot more than that in Pottapatty (55.3 percent) are falling in group one i.e., where the percapita income is below Rs350. Only nine percent in Kavarayapatty and fifteen percent in Pottapatty fall in the high income category of above Rs750, and rest fall in the middle income group. So, more than 50 percent of the people fall below subsistence level.

Summarizing the characteristics of sample villages, the findings can be briefly said that there are many similarities among both the villages such as the composition of religion, dependent population and agriculture orientation. Apart from these similarities there are few striking differences between the two villages in the composition of education, caste and employment status of people. Overall, Pottapatty seems to be better off compared to Kavarayapatty. Though there is larger proportion of SC population and landless households in Pottapatty there is a higher proportion of educated and self-employed people in Pottapatty. At the same time Kavarayapatty is better off in respect of landholding assets and type of houses owned. These striking differences might affect the distribution and composition of SHG membership and bank account holding status of individuals and households in each village, which we will be analysing in the forthcoming section.

To examine whether the chosen sample villages (Kavarayapatty from Dindigul district and Pottapatty from Madurai District) are representative of the percapita accounts at the macro-level, the deposit and credit accounts per thousand population computed from the data of both the villages were compared with that of the respective district level accounts per thousand population. Table 4.9 shows the comparison of accounts per thousand population of the sample villages with that of the respective district's. The district level results show a much higher proportion of account holders per thousand populations with reference to the villages chosen from respective districts. This wide gap between the percapita accounts of districts and villages maybe because, the sample villages are rural areas and the data at the district level is a combination of rural, semi-urban and urban areas.

Table 4.9
Representative Power of Sample Villages with Reference to Respective Districts

District / Village	Deposit Account per 1000 Pop	Credit Account per 1000 Pop
Dindigul (district)	367.7	72.6
Kavarayapatty (village)	80.9	36.0
Madurai (district)	574.2	84.1
Pottapatty (village)	85.4	25.0

Source: RBI, Basic Statistical Returns, 2001 for district data, Field Survey for village level data

Though the banking data (obtained from “Basic Statistical Returns [BSR]”, RBI) gives population group wise (rural, semi-urban and urban) distribution of deposit and credit accounts, it is not conducive to standardize it with the help of census population data because the unit of measurement^{*2} of population group is different for banking and census. Besides, the BSR has classified the deposit and credit accounts into rural, semi-urban and urban, whereas the census has only two categories, viz., rural and urban. Due to the difference in the unit of measurement of population group in BSR and Census, it was not possible for us to club the ‘semi-urban’ category with either ‘urban’ or ‘rural’ areas. Since there is no source to find the deposit and credit accounts per thousand population accruing to rural areas alone, one has to go in line with the computations for the same from the survey data.

4.3 Analysis of Banking Habits and its Determinants at Household Level

In section 3.5 of the previous chapter, we have observed the behavior of the deposit and credit account holdings of individuals. Though we found that there are lots of variations in the deposit and credit account holdings across the states, it could not be explained as to why such a variation exists. In order to explain this variation one has to know what determines the account holding status of an individual as these determinants may vary across the states. However with the available macro-data it was not possible for us to trace out the determinants. Hence as a solution to the questions posed in section 3.5 of chapter 3, with the help of micro-level survey data, this section tries to trace out the determinants of deposit and credit account holding status at household level first and then in section 4.4 a similar exercise is carried out at individual level.

On the same lines we shall now look at the banking habits among the people of sample villages and what determines the observed pattern of banking habits⁵. To start with, the aspects of deposit account holding are analysed. The proportion of households having bank deposit account is just around 32 percent of the total households. However Potapatty has slightly higher proportion of its households with bank deposit accounts. Table 4.10 reveals that nearly 70 percent of the households in Kavarayapatty & 67 percent in Pottapatty don't possess any deposit accounts at all. Around 14.5 percent of those who possess bank account have more than one bank deposit account in both the villages. If only 1/3rd of the households possess bank account(s), then what restricted the remaining 2/3rd of them from possessing bank account(s). What factors affect the household's bank account holding status.

Table 4.10
Distribution of Households According to Bank Deposit Account Holding

Village	No. of Accounts in Possession					Total
	Without A/C	1	2	3	4	
Kavarayapatty	72 (69.9)	27 (26.2) [87.1]	2 (1.9) [6.5]	1 (1.0) [3.2]	1 (1.0) [3.2]	103 {31} (100)
Pottapatty	76 (66.6)	32 (28.1) [84.2]	6 (5.3) [15.8]	0 (0.0)	0 (0.0)	114 {38} (100)
Total	148 (68.2)	59 (27.2) [85.6]	8 (3.6) [11.6]	1 (0.5) [1.4]	1 (0.5) [1.4]	217 {69}# (100)

Note1: Figures in normal brackets indicate proportion to total households. Figures in square brackets indicate proportion to those who possess bank account. Figures in flower brackets indicate absolute no. of only those who possess bank accounts

Note2: # The total of 69 in row three is not the total number of individual accounts, but it is the number of households with atleast one deposit account. Even if the particular household has more than one account here it is taken as one only, since it belongs to the same household.

Source: Primary Survey Data

The educational status of head of the household certainly matters in assessing the likeliness of a particular household possessing atleast one deposit account. Table 4.11 clearly shows that the likeliness of a household possessing atleast one bank deposit account increases as the number of years of education of the household head increases. We can observe that around 92 percent of the households whose head is having an educational status above higher secondary are possessing atleast one bank

⁵ Banking habits refer to, being a member of atleast one formal bank, with the possession of deposit account and / or credit account of that particular banks, & developing access to banking services such as bill-payments, money transfers and other such transaction by individuals. Here the analysis particularly deals with deposits and credit accounts only.

account. The proportion decreases as the educational status of the head is decreasing, as we can see that only 23.5 percent of households whose head is uneducated are in possession of bank accounts.

Table 4.11
Distribution of Households According to Deposit account Holding & Educational Status of Head of the Household

Deposit Account Holding	Educational Status of Head of the Household					Total
	Uneducated	Primary	Secondary	Higher Sec.	Above Hr. Sec.	
Without account	65 (76.5)	46 (73.0)	32 (74.4)	4 (30.8)	1 (7.7)	148 (68.2)
With Account	20 (23.5)	17 (27.0)	11 (25.6)	9 (69.2)	12 (92.3)	69 (31.8)#
Total	85 (100)	63 (100)	43 (100)	13 (100)	13 (100)	217 (100)

Note1: Figures in parenthesis denotes the proportion of respective counts to total in each educational group. Note2: # The total of 69 in row two is not the total number of individual accounts, but it is the number of households with atleast one deposit account. Even if the particular household has more than one account here it is taken as one only, since it belongs to the same household.

Source: Primary Survey Data

One can see from table 4.12 that the deposit account holding also varies with the kind of occupation in which the household head is involved. The likeliness of a household having bank deposit account is higher in those houses where the head of household is either regular salaried or self-employed. As high as 64 percent of the households whose head are regular salaried employee are having atleast one bank deposit account. Likewise 50 percent of the households whose head is self-employed are in possession of atleast one bank deposit account.

Table 4.12
Distribution of Households According to Bank Deposit Account Holding & Occupation of the Household Head

Deposit Account Holding	Occupation					Total
	Dependents	Regular Salaried	Wage Labour	Agricultural labour	Self-employed	
Without Account	29 (61.7)	9 (36.0)	23 (79.3)	64 (91.4)	23 (50.0)	148 (68.2)
With Account	18 (38.3)	16 (64.0)	6 (20.7)	6 (8.6)	23 (50.0)	69 (31.8)
Total	47 (100)	25 (100)	29 (100)	70 (100)	46 (100)	217 (100)

Figures in parenthesis denote the proportion of respective counts to total in each occupation group.

Source: Primary Survey Data

Apart from deposit account holding status, the credit account holding status among the households vary according to the type of employment of the household head.

Table 4.17 traces the distribution of households according to credit account holding and employment statuses of the house hold heads. Similar to that of deposit account holdings among households the credit account holdings happen to be higher in proportion for those households whose head is either regular salaried employee or self employed.

Table 4.13
Distribution of Households with Deposit Account
According to Income Group

Village	Income Groups (in Rupees)			Total
	100-350 Gr. I	351-750 Gr. II	Above 750 Gr. III	
Kavarayapatty	7 (22.6) [13.5]	17 (54.8) [40.5]	7 (22.6) [77.8]	31 (100) {103}
Pottapatty	4 (10.5) [6.3]	19 (50.0) [52.8]	15 (39.5) [100]	38 (100) {114}
Total	11 (14.5) {115}	36 (52.2) {78}	22 (33.3) {24}	69 (100) {217}

Note: Figures in normal brackets are a percentage of respective counts to total having Bank Accounts. Figures in square brackets are proportions of respective counts to total population in particular income group in each village. Figures in flower brackets are grand totals of respective rows and columns of total Population. (Gr. Implies Group)

Source: Primary Survey Data

Percapita income of the household is also an important determinant of a household having bank account. It can be observed from table 4.13 that the association is not clear by taking only the proportion of households who have bank accounts in each group to total households possessing accounts in the respective villages. It does not take into account the number of people in each group. It is not properly weighted.

A better measure of association would be to look at the proportion of account holders in each group. Though the share of bank deposit account holding households of income group I and III to total account holding households in Kavarayapatty doesn't have any difference i.e. 22.6 percentage each, there is huge difference when it is taken as a proportion to total number of households within each income group. Similarly the proportion of households possessing accounts in group I to total households in the same group is just on an average 9.6 percent, while that of group II & III happens to be 46.2 and 92 percent respectively. So, as the percapita income of the households increases the likeliness of possessing a bank account is higher. Same is the case if both the villages are looked individually with respect to income group classified above.

Among the households, who are in possession of bank deposit accounts, there are a few households who possess more than one account in both the villages. Table 4.14 shows that in Kavarayapatty out of the thirty-one households who are in possession of account, 13 percent of them have more than one account. The case is the same with Pottapatty too. The proportion of households having more than one bank account is greater in the higher income group. The larger the proportion of people in higher income group the higher would be the probability of households having more then one deposit account.

Table 4.14
Households Who Possess More Than One Bank Deposit Account

Village	Income Group (in Rupees)			Total
	100 to 350	351 to 750	Above 750	
Kavarayapatty	0 (0.0) [0.0]	1 (25.0) [3.2]	3 (75.0) [9.7]	4 (100) {31}
Pottapatty	1 (20.0) [2.6]	0 (0.0) [0.0]	4 (80.0) [10.5]	5 (100) {38}
Total	1	1	7	9

Note: Figures in normal brackets are a percentage of respective counts to total having >1 Bank Accounts. Figures in square brackets are proportions of respective counts to total households possessing deposit accounts in respective village. Figures in flower brackets are totals of households with atleast one deposit account.

Source: Primary Survey Data

Table 4.15
Distribution of Households According to credit Account Holdings

Village	Credit Account Holding Status		Total
	Without Account	With Account	
Kavarayapatty	86 (83.5)	17 (16.5)	103 (100)
Pottapatty	101 (88.6)	13 (11.4)	114 (100)
Total	187 (86.2)	30 (13.8)	217 (100)

Note: Figures in parenthesis are percentages of respective counts to total households.

Source: Primary Survey Data

Now coming to the information about bank credit account holdings, Table 4.15 shows that on an average only 14 percent of the total households of both the villages have bank credit accounts. Remaining 86 percent of the households do not have bank credit account. In Kavarayapatty the percentage of credit account holding households is higher (16.5 percent) than that of Pottapatty (11.4 percent).

Apart from deposit accounts, percapita income determines the household credit account holding too. In table 4.16, we can see that group III, which is the highest income group, possesses largest proportion of credit account holdings in both the villages. As the household goes down the ladder of income group, the proportion of people possessing credit account also decreases. So as the percapita income of the households increases the likeliness of possessing a bank credit account is more.

Table 4.16
Distribution of Households Credit Accounts
According to Income Group

Village	Income Groups (in Rupees)			Total
	100-350 Gr. I	351-750 Gr. II	Above 750 Gr. III	
Kavarayapatty	3 (17.6) [5.8]	9 (52.9) [21.4]	5 (29.4) [55.6]	17 (100) {103}
Pottapatty	0 [0.0]	8 (61.5) [22.2]	5 (38.5) [33.3]	13 {100} {114}
Total	3 (10.0) {115}	17 (56.7) {78}	10 (33.3) {24}	30 {100} {217}

Note: Figures in normal brackets are a percentage of respective counts to total having Bank Accounts.. Figures in square brackets are proportions of respective counts to total population in particular income group in each village. Figures in flower brackets are grand totals of respective rows and columns of total Population. (Gr. Implies Group)

Source: Primary Survey Data

4.4 Analysis of Banking Habits and Determinants at Individual Level

The main concern of our analysis in chapter 3 was the banking habits and its determinants at an individual level. Since the macro level data does not give any information of banking habits at household level we first tried to extract some patterns of banking habits at the household level as well, from the available survey data. In this section we shall do a similar exercise as it has been done in the previous section at household level, such that the determinants of banking habits at an individual level can be traced out. As a result, it will be easy for one to explain the variations in the banking habits across states, which was observed in the state wise analysis of banking habits in chapter 3. With this analysis we can know the category of people who have got access to bank, which the macro analysis could not reveal. We will start with the analysis of deposit account holders and then move on to credit account holders.

Table 4.17
Distribution of households According to Bank Credit Account Holding & Occupation of Household Head

Credit Account Holding	Employment Status					Total
	Unemployed	Regular Salaried	Wage Labour	Agricultural labour	Self-employed	
Without Account	42 (89.4)	19 (76.0)	24 (82.8)	67 (95.7)	35 (76.1)	187 (86.2)
With Account	5 (10.6)	6 (24.0)	5 (17.2)	3 (4.3)	11 (23.9)	30 (13.8)
Total	47 (100)	25 (100)	29 (100)	70 (100)	46 (100)	217 (100)

Note: Figures in parenthesis are proportions of respective counts to total population in particular occupation group in each village.

Source: Primary Survey Data

The total number of individual deposit accounts (82) is found to be more in number than that of the households (69). This is because there are few households as well as individuals who possess more than one bank deposit account. By way of classifying the bank accounts according to sex of the account holder, it can be found that on an average, 80 percent of the accounts are possessed by males and only remaining 20 percent of those accounts pertain to females. Out of the 20 percent accounts possessed by females, more than 14 percent accrue to SHG members who indeed are females. This is clearly shown in table 4.18. The results are quite interesting and reveal the same pattern as it was seen in the national, macro level data. Now let us try to analyze which category of people possess bank deposit account and who are deprived of it ? What determines the individual's possession of bank deposit account?

Table 4.18
Distribution of Bank Deposit Account by Sex of Account Holder

Village	Persons Having Bank Deposit Account			SHG Member's Account
	Male	Female	Total	
Kavarayapatty	31 (81.6)	7 (18.4)	38 (100)	4 (10.5)
Pottapatty	35 (81.4)	9 (18.6)	44 (100)	8 (18.2)
Total	66 (79.5)	16 (20.5)	82 (100)	12 (14.6)

Note Figures in parenthesis are percentages of respective counts to total account holders.

Source: Primary Survey Data

Educational status happens to have an influence in bank deposit account holding. As an individual acquires higher educational status it is more likely that he/she possesses atleast one bank deposit account. This association is clearly revealed in table 4.19.

One can observe that as the educational level increases the percentage of people possessing bank deposit accounts is also increasing. People having educational level above higher secondary have the highest proportion of deposit accounts (26.8 percent) and gradually the proportion decreases as the number of years of education decreases.

Table 4.19
Distribution of Deposit Accounts by Educational Status of Account Holder

Possession of Deposit Account	Educational Status					Total
	Uneducated	Primary	Secondary	Higher sec.	Above High.sec.	
No. of Person	10 (12.2)*	15 (18.3)	15 (18.3)	20 (24.4)	22 (26.8)	82 (100)
% to total Edn.St.#	3.46	4.56	6.88	18.87	51.16	

Note1: (*) Figures in parenthesis are percentages of respective counts to total.

Note2: (#) Indicates proportion of account holders to total population in respective educational group

Source: Primary Survey Data

Similarly when the proportion of account holders to total population within each educational class is analysed, then it is found that only 3.5 percent of illiterates have bank accounts. Even the proportion of bank deposit account holders among the people of primary and secondary education group is insignificant though it is little higher than the group of uneducated. The increase in percentage share is nominal till this point. There is not much difference within these classes. But if we observe the change in share of account holders to total, within the educational group for higher secondary and above higher secondary, it is comparatively very high (see last row in table 4.19). Nearly 19 percent of the people have deposit account among those who are in the higher secondary group and more than 50 percent of those who are in above higher secondary class possess bank deposit account. So with this result we can clearly state that education is an important determinant of individual's deposit account holding status.

In table 4.20 where deposit account holders are classified according to their employment status, it is more likely that higher percentage of regular salaried and self-employed individuals possess atleast one bank deposit account. Both villages taken together nearly 33 percent of the total number of account holders are regular salaried and another 31 percentage of them are self-employed. Only remaining 36 percent of bank deposit account accrue to rest of the three groups of agricultural laborers, daily

wage laborers and unemployed persons. When the proportion of account holders to total population within the respective type of employment class is observed, the highest likelihood to have a bank deposit account are again the same regular salaried and self-employed people.

Table 4.20
Distribution of Deposit Accounts by Employment Status of Account Holder

Village	Employment Status					Total
	Unemployed	Regular Salaried	Wage Labour	Agri. Labour	Self Employed	
Kavarayapatty	8 (21.1) [5.80]	9 (23.7) [36.0]	6 (15.8) [14.3]	4 (10.5) [3.90]	11 (28.9) [27.5]	38 (100) {346}
Pottapatty	8 (18.2) [4.76]	18 (40.9) [60.0]	1 (2.3) [2.1]	3 (6.8) [3.5]	14 (32.6) [31.8]	44 (100) {374}
Total	16 (19.5)	27 (32.9)	7 (8.5)	7 (8.5)	25 (30.5)	82 (100)
Total Class St.	{304}	{55}	{89}	{188}	{84}	{720}

Note: Figures in normal brackets are percentages of respective counts to total. Figures in square brackets are proportions of respective counts to total population aged 15 years and above in each village. Figures in flower brackets are grand totals of respective rows and columns.

Source: Primary Survey Data

It is clear that 36 percent of regular salaried people in Kavarayapatty and as high as 60 percent in Pottapatty are in possession of at least one bank deposit account. Similarly 28 percent of self-employed people in Kavarayapatty and 32 percent in Pottapatty are in possession of at least one deposit account. On the whole almost half of regular salaried and one third of self-employed people possess bank deposit account. The proportion of account holders within the remaining three occupation group is very meager - around three percentage, except for that in Kavarayapatty, wage laborers contributed as much as 14 percent among their own occupation people.

Income of a particular individual determines one's possession of bank account. It can be seen from table 4.21 that the proportion of individuals in possession of bank account increases as the individual's income increases. The higher income group has the largest proportion of individuals who have at least one bank account with them. The proportion decreases as the individual's income decreases.

Table 4.21
Distribution of Bank Accounts According to Income group of Account Holder

Village	Income Group (in Rupees)			Total
	100 to 350	351 to 750	Above 750	
Kavarayapatty	4 (10.5)	9 (23.7)	25 (65.8)	38 (100)
Pottapatty	4 (9.1)	8 (18.2)	32 (72.7)	44 (100)
Total	8 (9.8)	17 (20.7)	57 (69.5)	82 (100)

Note: Figures in parenthesis are percentages of respective counts to total.

Source: Primary Survey Data

Table 4.22
Distribution of Bank Deposit Accounts According to Distance to the Bank

Accounts in Village	Distance to Bank				Total
	1 to 5 kms	6 to 10 kms	11 to 15 kms	Above 15 kms	
Kavarayapatty	31 (81.6)	2 (5.3)	5 (13.2)	0 (0.0)	38 (100)
Pottapatty	18 (40.9)	19 (43.2)	2 (4.5)	5 (11.4)	44 (100)
Total	49 (59.8)	21 (25.6)	7 (8.5)	5 (6.1)	82 (100)

Note: Figures in parenthesis are percentages of respective counts to total account holders.

Source: Primary Survey Data

An important determinant of bank deposit account holding is the distribution of bank branches. If the distribution is such that the distance to the branch office from a particular area is small, then the number of accounts increases in that area. This can be observed from table 4.22 which shows that maximum number of deposit accounts is possessed from that bank which is least distant from individuals residence. 82 percent of Kavarayapatty's and 41 percent of Pottapatty's deposit accounts were in the nearest banks that were just below five kms from the place of their residence. On an average in both the villages nearly 60 percent of the total deposit accounts were in the least distant banks that were within five kms from their respective homes. Next highest number of deposit accounts were from the banks that were within 10 kms (26 percent), followed by banks that were within fifteen kms (9 percent) and finally those in those banks which were located in distances above fifteen kms (6 percent). Hence, from this result we can conclude that distribution of bank branches all over the regions is an important determinant of number of deposit account holdings in that region.

Among the deposit account holders many might not have opened the account for usual savings, deposits, withdrawals and other transactions. They would have opened the account only for accessing formal loans from banks. This is because in the formal

banking system in India, a loan will not be sanctioned without he or she being a member of that particular bank⁶. For having a membership in any formal bank one should definitely have a deposit account of the respective bank.

Let us now see how many of the bank account holders have opened bank accounts just for getting loans in that particular bank. Since the formal bank needs an individual to be a member of that bank for getting a loan and the necessary condition for being a member is opening a deposit account in the particular bank, members may open deposit accounts just to acquire some credit from bank. Therefore it is easy for us to know whether the individual have opened a deposit account just for getting credit, if the date of opening the deposit account and date of opening credit account is known.

Table 4.23
Distribution of Credit Account Holders according to Purpose & Frequency of Operation of Their Deposit Account

Village	Frequency of Operation of Deposit Account in Last 3 Months					Total
	Purpose of Deposit A/C	once in a Month	once in 2 months	once in 3 months	Idle for a long time	
Kavrayapatty	All Purpose (a)	2 (50.0)	1 (25.0)	0 (0.0)	1 (25.0)	4 (100)
	Loan Only (b)	0 (0.0)	0 (0.0)	0 (0.0)	13 (100)	13 (100)
	Total (1)	2 (11.8)	1 (5.9)	0 (0.0)	14 (82.4)	17 (100)
Pottapatty	All Purpose (c)	4 (57.1)	0 (0.0)	2 (28.6)	1 (14.3)	7 (100)
	Loan Only (d)	0 (0.0)	0 (0.0)	0 (0.0)	6 (100)	6 (100)
	Total (2)	4 (30.8)	0 (0.0)	2 (15.4)	7 (53.8)	13 (100)
Total Loan A/Cs Only (b + d)		0 (0.0)	0 (0.0)	0 (0.0)	19 (100)	19 (100)
Grand Total (1+2)		6 [20.0]	1 [3.3]	2 [6.7]	21 [70.0]	30 (100)

Note: Figures in normal brackets indicates proportions to total of respective village/purpose

Figures in square brackets indicates proportions to respective operation frequencies/column

Source: Primary Survey Data

It is sufficient for us to make an analysis only with the data for those who have credit account since we are testing the purpose and operation frequency of deposit account accruing to credit account holders only. This is due to the suspicion that credit account holders have opened deposit accounts only to get formal credit from the banks. So if both, the date of opening credit account and deposit account is the same (condition 1) then we can say that the deposit account is opened just for getting loan from that bank,

⁶ For detailed explanation regarding terms and conditions for taking formal loan, refer figure 3.4

provided both accounts are from the same bank (condition 2). In this analysis the data from field survey assures condition 2, though we are not bringing this variable into analysis. Hence, **if number of credit account ≥ 1 & date of deposit account opened = date of credit account opened, & operation frequency is idle then the deposit account is just for loan purpose.**

So from table 4.23 it can be observed that, among the total of 30 deposit account which is accompanied with credit accounts, 19 deposit account is opened just for loan purpose. That comes to nearly 63 percent which is fairly high, signifying that many have deposit account just because they wanted access to formal loan from bank. Out of the 30 deposit accounts corresponding to existing credit account, (combined in both the villages) 21 deposit accounts are idle accounts within which 19 are just opened for loan purpose i.e, nearly 90 percent of idle deposit accounts is opened just for loan purpose.

Table 4.24
Distribution of Individuals Credit Account Holding According Occupation

Credit Account holding	Occupation of Bank Credit Account Holders					Total
	Unemployed	Regular Salaried	Wage Laborer	Agriculture Laborer	Self Employed	
With Account	6 (19.4)	7 (22.6)	5 (16.1)	3 (9.7)	10 (32.3)	31 (100)

Note: Figures in parenthesis are percentages of respective counts to total account holders.

Individual credit account totals to 31 unlike the households because one individual possess 2 credit accounts simultaneously

Source: Primary Survey Data

Turning to the individual credit account holdings, table 4.24 shows that the credit account holders are mostly self-employed people followed by regular salaried people. Out of the total number of credit account holders, 32.3 percent of them are self-employed and 22.6 percent are regular salaried people. Only the rest of the 45 percent is shared by wage laborers, agriculture laborers and unemployed credit account holders. Hence we can conclude that, the more number of self-employed & regular salaried people, the more we can expect credit accounts to be held in that region.

4.5 Impact of Micro-Credit SHGs on Individual Banking Habits

The analysis of trends of banking habits at macro level in the previous chapter revealed that the per capita deposit accounts for females were increasing over the

years, while this increasing trend of per capita deposit accounts of males was not found. In fact it showed a decreasing trend. It was also observed that the overall number of deposit account was increasing, which gave the conclusion that whatever increase in over all deposit account was due to the increase in the deposit account holding of females.

Since the micro-credit SHGs India are comprised of women, the previous chapter suspected that the involvement of SHGs in micro-credit programs could have made this difference. Probing into this trend, the analysis in section 3.7 exhibited a moderate association between the growth of percapita SHGs of females and the growth rate of per capita bank deposit accounts of females at a macro level. In order to test this observed association between growth of SHGs and deposit account holding of females in the recent years according to the previous chapter, this section tries to trace out the impact of micro-credit SHGs on individual / household banking habits.

To start with, we shall look at the percentage of population who are members of SHGs. Table 4.25 shows that on an average of both the villages 25.4 percentage of the total women folk are members in SHGs. Individually taken, Pottapatty village which is a more experienced village in terms of number of years of SHG operation has higher proportion of its women involved in SHGs. Now we can see the association of various SHG member's information with their bank account holding status. It can be seen in table 4.25 that only 12 out of 88 (13.6 percent) have bank accounts among the SHG members. Out of these 12 account holders only 4 account holders (33 percent) belong to Kavarayapatti the rest 67 percent belongs to Pottapatty. What leads the variation in account holding status with in the SHG members them selves? Let us try to trace out, what determines the account holding of any SHG member?

The association between SHG members and bank deposit account holding reveals that, Kavarayapatty which is a less experienced village in terms of number of years of exposure to operation of SHGs, has only 11 percent (4 among 37 members) of its members holding bank deposit accounts. On the other hand Pottapatty which is having greater exposure to operation of SHGs in the village has comparatively higher proportion of its SHG members who possess bank deposit accounts (16 percentage).

Hence we can say that, as the number of years of SHG existing in a particular place increases the likeliness of its members having bank deposit account is higher.

Table 4.25
Distribution of Female Population⁷ on the Basis of SHG Membership & Bank Deposit Account Holding

Village	SHG membership & Account Holding			Total
	Account Holding Status	Non-Member	Member	
Kavarayapatty	Without Account	126 (79.2)	33 (20.8)	159 (100)
	With Account	3 (42.9)	4 (57.1)	7 (100)
Total		129 (77.7)	37 (22.3)	166 (100)
Pottapatty	Without Account	129 (75.0)	43 (25.0)	172 (100)
	With Account	1 (11.1)	8 (88.9)	9 (100)
Total		130 (71.8)	51 (28.2)	181 (100)

Note: Figures in parenthesis are percentages of respective counts to total account holders.
Source: Primary Survey Data

But the above relationship may not hold good because many of them might have opened their account before joining the group. Therefore we cannot say that it is an impact of SHGs on its members. So if really this has to be tested we need to see the time point when the member joined SHG and the time point when she opened the account. If the individual's number of years as SHG member is greater than the number of years of existence of her bank account, then we can claim that account opening by that members as an impact of operation of SHG. i.e., **if the individual bank account holding ≥ 1 & time length of bank account holding $<$ time length of being in SHG as a member, then we can say that the account is an impact of SHG membership.** In table 4.25 we can observe that there are a hand few who are both SHG members as well as who possess bank deposit accounts. In Kavarayapatty (less exposed village) there are only 4 members out of total 37 SHG members who possess bank accounts, which is just 11 percentage, where as in Pottapatty (more exposed village) there are 8 SHG members who have bank accounts with a comparatively larger proportion (16 percent) of its members possessing bank accounts. Though these proportions seem to be too small, there is certainly

⁷ For analysis of SHG members in comparison with the non members, only female population aged 15 years and above has been taken into consideration since the SHG members are exclusively adult females.

considerable amount of impact of higher exposure in Pottapatty. We can also see a better measure of impact by way of looking at the proportions of people who have opened their account before and after joining SHG to total account-holding SHG members.

Table 4.26
Distribution of Bank Deposit Account Holders among SHG Members According to Point of Time of Opening Account

Village	Bank Deposit Account Status				Total
	Without Account	With Account	Opened Before	Opened After	
Kavarayapatty	33 (89.2)	4 (10.8) {33.0}	1 (2.7) [25.0]	3 (8.1) [75.0] {30.0}	37 (100)
Pottapatty	43 (84.3)	8 (15.7) {67.0}	1 (2.0) [12.5]	7 (13.7) [87.5] {70.0}	51 (100)
Total	76 (86.4)	12 (13.6) {100}	2 (2.3) {100}	10 (11.4) {100}	88 (100) {100}

Note: Figures in normal brackets indicate percentages of respective counts to total SHG population in respective village. Figures in square brackets indicate proportion to total account holders in respective village only. Figures in flower brackets are proportion to total within each column variable.

Source: Primary Survey Data

Firstly we can observe that the operation of SHG itself have much impact on bank account holding irrespective of years of operation. Both the villages have atleast 75 percent of their SHG member account holders who have opened their account only after joining the SHG. The impact of duration of operation is much clearer. Kavarayapatty which is a less exposed village to SHG operation have 75 percent of its members having opened their account after joining SHG where as in Pottapatty which is a more experienced village has as much as 88 percentage of its SHG member account holder having opened their account after joining SHG.

By analysing the distribution of SHG members according to their leadership position and bank account holdings in table 4.27, we can say that among the SHG members only 14 percent of them have their own individual bank accounts apart from their group account. But it is important to notice that out of the 12 SHG members who have individual bank accounts 10 (83.3 percent) of them have been in a position of leading the group. Leadership gives the members more insight to the banking culture, as they are the people responsible for operating the group accounts. They are exposed fully to the operations of the bank and know how useful it is to have transaction with banks.

Table 4.27
Distribution of SHG members According to Leadership & Bank Account Holdings

Leadership Status	Account Holding Status		Total
	Without account	With Account	
Not Lead at all	55 (96.5) [72.4]	2 (3.5) [16.7]	57 (100)
Lead	21 (67.7) [27.6]	10 (32.3) [83.3]	31 (100)
Total	76 (86.4) [100]	12 (13.6) [100]	88 (100)

Note: Figures in normal brackets are percentages of respective counts to total SHG in each group of leadership status. Figures in square brackets indicate proportions to total of each account holding status group.

Source: Primary Survey Data

Table 4.28
Distribution of Credit of SHG members By Source & Time Point

Source of Credit	Time Point of Credit Taken			Total SHG Members
	No Credit till Now	Before Joining SHG	After Joining SHG	
SHG	8 (9.1)	-	80 (90.9)	88 (100)
Money Lenders & Others	-	26 (30.0)	6 (6.8)	

Note: Figures in parenthesis are percentages of respective counts to total SHG Members.

Source: Primary Survey Data

So being a leader in the SHG gives incentives for them to have relationship with banks directly. More experienced regions with SHG operations will have more number of members with leadership experience of SHGs operation, as the leadership is given to each member in rotation. So more numbers of years of experience of SHGs operation in an area, more rotation, more SHG leaders and thus the increases in bank account holdings is higher. If the rotation of leadership is quicker, we can expect more number of bank accounts in that region. Since the rotation in Pottapatty village is very slow (once in a year and that too haphazard), the impact seems to be less than expected, though there is certainly some impact.

Tracing the sources of credit held by SHG members and the time point of those credits, we can easily say that the operation of SHGs has certainly decreased the dependence of people on exploitative moneylenders. Computing all the values of dates of borrowings from various sources and the time of joining SHG, we can identify

the members who are borrowing from moneylenders even after joining SHGs where in **Source = moneylenders & number of years of experience in SHG as a member > date of that particular loan taken.** (Both the values are given in months before, joined & loan taken).

Table 4.28 shows that, out of the total 88 SHG members in both the villages combined only 8 members (9 percentage) have not taken credit at all from SHG as they have joined recently whereas the remaining 80 members (91 percent) have taken loans from SHGs. Apart from that the percentage of people who have borrowed from money lenders and other sources before and after joining SHGs, it is very clear that the dependence of people on moneylenders have come down drastically. Before joining the SHGs 30 percent of the members were taking loans from moneylenders where as now it has decreased to just 6.8 percent. This is a positive impact of operation of SHGs.

Till now we have made an attempt to bring out the association of banking habits (deposit and credit account holding) with various socio-economic factors of households and individuals. The cross-tabulations revealed that there is significant relationship of deposit account holding status of households with variables such as occupation of the household head, his/her educational level, per capita income of the households, total household land holding and SHG leadership of the household head. On the other hand the individual deposit account holding status is significantly associated with sex of the individual, family status (household head/other member of the family) and SHG membership, apart from those variables which were associated with the household bank deposit account holdings.

With respect to credit account holding status, the individual as well as household credit account holding status is associated with variables such as occupation, education and income. Apart from these variables sex and family status of an individual and total land holding of household are significantly associated with individual and household account holding status respectively. With this we can know the variables which individually affect the individual's and household's bank account holding status.

Though now we know that there is a close correspondence between variables such as sex, occupation, education, family status, income, SHG membership and SHG leadership with account holding status, it is not clear, which variable affects the most and what is the magnitude of influence of each variable when all variables interact simultaneously. In this regard, cross tabulations have their limitations. So, a multivariate analysis is necessary to sort out the main factors, controlling for other co-variates. Hence to confirm the magnitude of impact of each variable on account holding status, we use a binary logistic regression analysis (Logit Model). The Logit model can be used not only to identify the overall determinants but also predict the conditional probability of holding a bank account, given the significantly associated variables. The binomial logistic regression model expresses a qualitative dependent variable as a function of several explanatory variables, both qualitative as well as quantitative (Hamilton, 1992). If P is the probability of account holding, then

$$P = [1 + e^{-\beta X}]^{-1}$$

Where ‘ β ’ is a vector of the unknown coefficients and ‘X’ is a vector of co-variates that affects the probability of holding an account. Thus, the general Logistic model can further be expressed as

$$\text{Loge} [P_i / \{1 - P_i\}] = \beta X = \sum_{j=0}^k \beta_j X_{ij}$$

Which expresses the log odds of account holding status as a linear function of the explanatory variables.

In this analysis, we have defined the binary dependent variable that is assigned the value of 1 if the individual / household possesses atleast one bank account and 0 for those who don’t possess even one bank account. A set of socio-economic factors that were significantly associated with the respective account holding status was fixed as explanatory variables. The significantly associated factors with respective dependent variables are presented in table 4.29.

Multicollinearity is a problem that plagues almost all multivariate techniques, such as multiple regression, discriminant function analysis, canonical correlation, factor analysis and even logistic regression. In particular, when the variables are very highly correlated (e.g. $r > 0.7$), the powers of these techniques are severely compromised. Very high correlations tend to increase the standard errors. In addition, extremely high correlation can terminate the procedure altogether. Therefore it is on the safer side to examine the inter-relationship between various socio-economic variables.

Table 4.29
Co-Variates of Account Holding Status with Respect to
Individuals and Households

Co-variates of Individual's Deposit Account Holding Status	Co-variates of Household's Deposit Account Holding Status	Co-variates of Individual's Credit Account Holding Status	Co-variates of Household's Credit Account Holding Status
Sex	-	Sex	-
Occupation	Occupation	Occupation	Occupation
Education	Education	Education	Education
Family Status	-	Family Status	-
Income	Per Capita Income	Income	Per Capita Income
SHG Membership	-	-	
SHG Leadership	SHG Leadership	-	-
-	Total Land Holdings	-	Total Land Holdings

Note 1: For individual's account holding status the co-variates are with respect to the respective individuals. But for household's account holding status, the co-variates are with respect to the head of the household. For example education implies the educational status of household head.

Note 2: The codes are given in ascending order starting from 0 for the first category.

Sex : Male / Female

Occupation : Unemployed / Agricultural Labour / Wage Labour / Self Employed / Regular Salaried

Education : Uneducated / Primary / Secondary / Higher Secondary. / Above Higher Secondary

Family Status : Other Members of the Family / Head of Household

Per Capita Income per month in Rs. : 100-350 / 351-750 / Above 750

Total Household Land Holdings in Acres : 0.01-0.05 / 0.06-2.50 / above 2.50

SHG Membership : non-member / member

SHG Leadership : never lead / lead atleast once

Source: Primary Survey Data

Table 4.30 presents the Zero-order correlation matrix. It indicates that though there is a minimum correlation between variables, the correlations are not very high. Two correlations [(income earnings and occupation) and (SHG Leadership and SHG

Membership)] are quite high compared to others, but however they don't seem to be very high to affect the fit of the model. So, we can go ahead including all the variables as it is in the logistic regression model. The results of logistic regression analysis are presented in table 4.31. It shows the simultaneous effect of socio-economic variables on the likelihood of household / individual bank account holding status. The results suggest that not all the variables which had significant association with the account holding status independently, are significant predictors of account holding status. Some socio-economic variables such as occupation, which had significant association with the account holding status of both the households as well as individuals, were found to be insignificant when all variables are put simultaneously.

Table 4.30
Zero Order Correlation Matrix Showing the Relationship
Between Socio-Economic Variables

	Sex	Occu- pation	Educ- ation	Family Status	Income Earning	SHG Memb.	SHG Lead	Land Hold	Distance Index
Sex	1.000	.152**	.175**	.417**	.413**	-.326**	-.186**	.107	.061
Occupation		1.000	-.078*	.377**	.567**	.163**	.068*	-.178**	-.238*
Education			1.000	-.080*	.229**	-.175**	-.111**	.189**	.391**
Family Status				1.000	.424**	-.081*	-.026	.a	-.143
Income Earn					1.000	-.062	-.036	-.036	.106
SHG Memb.						1.000	.576**	-.159*	-.107
SHG Lead							1.000	-.092	-.161
Land Holdings								1.000	.010
Distance Index									1.000

Note: (**) Correlation is significant at 0.01 level

(*) Correlation Significant at 0.05 level.

(. a) Cannot be computed because at least one of the variables is constant.

Source: Primary Surveys Data

However, the logistic regression analysis revealed that there is a positive relationship between the number of years of education and deposit account holdings both at individual as well as household level. The individuals and households with education above higher secondary have 15 and 7 times more likely to hold a bank account as compared to the uneducated.

Table 4.31
Results of Logistic Regression Indicating the Simultaneous Effect of
Socio-Economic Variables on Household & Individual Account Holding Status

Account Holding Status	Individual Deposit Account Holding	Household Deposit Account Holding	Individual Credit Account Holding	Household Credit Account Holding
Variables	Co-efficient(s) Based on Reference Category			
Gender Exp (β)				
Males	1.5519	1.4049	0.8178	0.6682
Family Status (Head / Other Members) Exp (β)				
Head of Household	10.2057***	-	24.2400***	-
Educational Status Exp (β)				
Primary	0.9440	1.2565	0.6079	0.7457
Secondary	0.6706	0.82.4	0.5633	0.8414
Higher Sec.	4.3331**	7.4303**	1.5474	1.6726
Above Hr.Sec.	15.6540***	7.4507*	1.4106	1.2808
Occupational Status Exp (β)				
Agricultural Labour	0.3990	0.1142	0.3519	0.4808
Wage Labour	0.5019	0.1928	0.8548	1.1672
Self Employed	2.3403	0.5910	1.6720	1.2404
Regular Salaried	1.7265	0.6458	1.1511	1.1335
Land Holding Status				
0.06 to 2.50 Acres	-	3.6687**	-	1.7525
Above 2.50 Acres		5.3336***	-	2.8670*
Income Group Exp (β)				
Middle Income Gr.	1.0682	2.7018	0.7008	0.8390
High Income Gr.	4.8874*	9.8453*	4.2629	3.3820
SHG Membership Exp (β)				
SHG Member	2.9976	15.8488	0.0062	0.0165
SHG Leadership Exp (β)				
Lead Atleast Once	23.7217***	2.2813	239.9494	135.1558
Model Fitness Measures				
-2 Log likelihood	308.060	154.176	174.556	139.0311
Model χ^2	232.278***	82.474***	94.008	23.816
Measure of Overall Predictability	94.42	86.18	96.95	88.02
N (No. of Cases)	985	217	985	217
Degrees of Freedom(df)	1	1	1	1

Note: 1. Exp (β) Coefficients = Odd Ratios.

2. The reference category for "Gender" is "Female", "Uneducated" for "Educational Status", "Unemployed" for "Occupational Status", "Low Income Group" for "Income Group", "Other Than Head" for "Family Status", "SHG Non-Member" for "SHG Membership", "Never Lead" for "SHG Leadership Status".

3. (***) Significant at all levels, (**) significant at 5 percent level, (*) Significant at 10 percent level.

Source: Primary Survey Data

Similarly, the income of the individuals and per capita income of the households does show a positive relationship with deposit account holding status of individuals and households. As the income increases the likeliness of a person / household possessing deposit account increases. Apart from that, at individual level the likeliness of an individual possessing deposit account is more if he / she is the household head and / or if that person is or has been a leader of a micro-credit SHG atleast once. The family status also significantly influences the individual's deposit account holdings. If the person is the household head, then he / she is 10 times more likely to possess a bank credit account as that of other members of the family. At the same time another factor which affects household's deposit account holding status is the total land holdings. It shows that the increase in size of land holding of household will lead to an increase in the likeliness of that household possessing atleast one deposit account.

But of all the predictors, the individual's leadership experience happens to be the most dominant factor in individual's account-holding status followed by education level. An individual who has been a leader is 23 times more likely to hold a bank account as that of a person who has never experienced leadership position in SHGs. The coefficient is very large and the presence of leadership experience makes a huge difference in deposit account holding status of an individual. With respect to household deposit account holding status the percapita income of the household plays a dominant role. The high-income group is 9.8 times as likely as a low-income household to hold a bank account.

On the other hand, with respect to bank credit account holding status of individuals and households, not many variables are significant. While individual's credit account holding is affected by family status, the household's credit account holding status is influenced significantly by total land holding of the household. Total land holding is positively related with household credit account holding status. The households with land above 2.5 acres are 2.8 times as likely as the persons who are having land ranging from 0.01 to 0.06 acres, to possess atleast one bank credit account. Similarly at the individual level if the person is the household head, then he is 24 times more likely to possess a bank credit account as that of other members of the family.

4.6 Major Findings

This chapter traced out the banking habits and its determinants based on data collected from the sample villages. The chapter has also examined the impact of SHGs on individual and household banking habits. From the analysis, it has been found that only 32 percent of the households have got access⁸ to the formal banks out of which just 13 percent have access to formal credit. While trying to examine the independent effects of certain socio-economic indicators derived from the sample villages, some of the important associations between these variables and individual / household banking habits were found out. Educational status of individuals/heads, income group and total land holding of households had a positive association with individual and household bank account holding status respectively. The distance of the bank from the individual's residence was found to be significantly negatively associated with bank account holding. Apart from that, occupation, family status and leadership positions in SHGs have significant association with the account holding status.

Since the establishment of independent associations of various variables on account holding status does not bring out the importance of each variable when all variables interact simultaneously, we rely on a multivariate analysis viz., logistic regression, to capture the simultaneous effects. The results of logistic regression shows that, being a member of SHG alone does not influence the account holding status of individual much, but the SHG leadership experience determines the individual deposit account holding status even after controlling for other variables such as education, income and family status. Leadership experience has more to say about the individual's deposit account holding status than merely being a member in SHG. On the other hand the individual credit account holding is significantly associated with family status alone. Per capita income of the households affects the household deposit account holding the most controlling for the other significantly determining variables such as education and land. However, the household credit account holding status is significantly determined by total land holdings only.

⁸ Access here refers to the possession of bank deposit and / or credit accounts

One of the important variable viz., “the distance of bank (where the individual has opened the account) from individual’s residence”, could not be fitted as an explanatory variable in the logistic regression analysis because this particular information is not available for the individuals who don’t possess any bank account. Logistic regression could be computed only if the information is available for both categories of people (those who possess bank accounts and those who don’t)

Regarding the impact of SHGs on banking habits it is evident from the analysis that the proportion of people having bank accounts among SHG members is insignificant but it is quite interesting to see that, among those who are in possession of bank accounts nearly 83 percent have been in the position of leading the group. The analysis reveals that greater experienced village have more proportion of its members having relationship with banks. And also it can be seen that among the members, who possess bank accounts, most of them have opened those accounts only after becoming a member of SHG. This proportion is more, in more experienced village. Hence we can say that, as the number of years of experience in SHG operation in a particular region increases the likeliness of higher proportion of its members having relationship with banks increases.

An important finding is that, being a leader for a SHG gives more incentive for them to have relationship with formal banks by way of opening a deposit account. This is not only shown by the cross tabulation analysis but also by the logistic regression analysis, which shows that the individuals deposit account holding status is mainly determined by SHG leadership experience. From the cross tabulations we can see that, out of those SHG members who have bank accounts, nearly 81 percent of the total number of accounts accrue to those who have been leader of SHG atleast once. So, more experienced regions will have more members having leadership experience and the probability of having more number of accounts is higher. Therefore we can conclude that more than the mere existence of SHGs in a particular region the experience of the SHG operation in that area plays important role in determining banking habits of individuals and households in that area.

Lastly, it has been found that the SHGs have decreased the dependence of their members on exploitative moneylenders. It was seen that before joining SHG 30 percent of its members were borrowing from money lenders but after joining SHGs the proportion of members still borrowing from money lenders have decreased to just 6 percent. So the operation of SHGs in a region decreases the dependence of people on exploitative moneylenders.

End Notes

*1 For calculating the distribution of population on the basis of occupation, only the population aged 15 years and above is taken into consideration.

Self employed are person who operate their own farm or non-farm enterprises or are engaged independently in a profession or trade on own account or with one or a few partners.

Regular salaried / Wage employees are persons employed in others farm or non-farm enterprises and getting return, salary or wages on a regular basis.

A person is considered to be engaged as agricultural labour if he/she follows one or more of the following agricultural occupation in the capacity of a wage paid manual labour, whether paid in cash or kind or both. (i) farming, (ii) Dairy Farming (iii) production of any horticultural commodities (iv) Raising of live stock or poultry and (v) any activity performed on a farm as incidental to or in conjunction with farm operations (including forestry and timbering)

Casual wage labour are persons casually engaged in other farm or especially non-farm enterprises and getting in return wage according the terms of daily or periodic work contract. Usually in rural areas a type of casual labourers can be seen who normally engage themselves in 'public works' or those activities sponsored by government or local bodies for construction of roads, buildings, bunds, digging of canals and ponds etc.

*2 Banking Classification of Population Group : (refer RBI, Basic Statistical Returns, 2001- pp. iii)

Population < 10,000 = Rural

Population > 10,000 but < 1 Lakh = Semi-Urban

Population > 1 Lakh but < 10 Lakh = Urban

Population > 10 Lakh = Metropolitan

Census of India Classification of Population Group :

(refer to Website http://www.censusindia.net/results/eci14_page1.html)

The classification of an area as an Urban / Rural unit in Census of India 2001 is based on the following definition:

Urban : (i) All places declared by the state government under a statute as a municipality, corporation, cantonment or notified town area committee, etc.

(ii) all other places which simultaneously satisfy the following criteria

(a) A minimum population of 5,000;

(b) Atleast 75 percent of male working population engaged in non-agricultural economic pursuits and

(c) A density of population of atleast 400 per Sq.Km.

Rural : Any area which is not covered by the definition of 'Urban' is 'rural'.

CHAPTER V

SUMMARY AND CONCLUSION

A consensus is emerging among researchers that the formal financial sector is not effectively serving the rural population especially after the financial liberalisation in 1991. This is mainly attributed to the failure of financial intermediaries in fulfilling their basic functions; viz., lending production credit to finance income generating activities, lending consumption credit to maintain and expand human productive capacity, and offer quality saving scheme for increasing risk bearing capacity of the rural households (Namboodiri & Shiyani, 2001). In connection with this, we tried to analyse the trend of credit disposal of the formal banks to agriculture and rural development, on the basis of trend of credit amounts and accounts of the formal banks accruing to agriculture and rural development, number of rural bank branches, priority sector lending, the movement of credit-deposit ratio in rural areas and the trends in amount and number of small borrowal accounts (SBA's) in the formal banks.

In all ways and means, it was found that the credit to agriculture and rural development was decreasing especially after financial liberalisation. Apart from that, even the overall number of credit accounts was decreasing. This was revealed by a state wise analysis of over all bank credit accounts. While probing into the reason for decreasing trend of overall number of credit accounts, it was found that the trend of deposit accounts could be a major cause for the trend of credit accounts, since to hold a credit account, deposit account holding is a necessary condition.

Simultaneously a state wise analysis of the trend of number of deposit accounts showed that though there is a an increase in the number of deposit accounts among most of the states, on an average there happens to be only 418 accounts per thousand population. There is a wide disparity in this statistics among the states. At the same time the analysis of deposit accounts on the basis of gender of the account holder showed that, the number of deposit accounts accruing to females were increasing over the years from 1996 till now, on the other hand the deposit accounts accruing to males is decreasing. But interestingly, the overall number of deposit accounts per thousand populations was increasing. So the increase in number of overall deposit accounts was proven to be just because of the increase in the number of deposit accounts accruing to the females.

Given that almost all the micro-credit SHG members in India are women, we have tried to seek answers to the following questions:

Is the increase in number of deposit accounts accruing to females, over the years due to the operation of micro-credit SHGs? If only 418 people out of thousand is in possession of deposit accounts then, who are privileged to possess accounts ? To which category do they belong? If there is a wide disparity in number of deposit account holders among the states, then what are the socio-economic factors that determine these disparities?

Similarly, the analysis of trends and patterns of credit accounts showed that the number of credit accounts per thousand populations decreased over the years. It also projected that, on an average there are only 51 accounts per thousand population. However, it showed a high disparity in number of accounts per thousand population among various states, and most of the states that have higher number of deposit accounts per thousand population, seem to be socially and economically developed. If there are only 51 accounts per thousand populations then who are the people who are deprived of formal credit? Does the micro-credit programme through SHGs effectively serve these excluded population and ease them from the clutches of the moneylenders. What are the probable causes for the interstate disparities in number of credit accounts per thousand populations?

Since the available secondary data was insufficient to answer these questions, required data was collected from two appropriately sampled villages. The sample villages were selected in such a way that one village (Kavarayapatty) is a less experienced village and the other is a more experienced village (Pottapatty) in terms of number of years of operation of SHGs, so that the impact of micro-credit SHGs on banking habits can be clearly captured. The variables required for the analysis was collected through a structured questionnaire.

The results from the field data revealed a pattern of banking habits similar to that of banking habits at the macro level, i.e., there are not even half of the population who are in possession of bank deposit accounts. The percapita number of persons who are in possession of bank credit accounts are even less than that of the deposit account holders. The analysis of survey data revealed that though the cross tabulations show a

close correspondence of individual's deposit and credit account holding status with socio-economic variables such as sex of the individual, his / her occupation, family status, education, income earnings and SHG leadership experience; Logistic Regression, which is a better technique for multivariate analysis, showed that only family status of the individual, education, income earnings, and SHG leadership experience in case of deposit account holding status and family status of the individual alone for credit account holding status, significantly affect the individual's account holding status. Out of the four factors that was found to be significantly affecting the individual's deposit account holding status, the SHG leadership experience has the largest co-efficient implying that presence of leadership experience makes a big change in the individuals deposit account holding status.

On the other hand for the household's deposit and credit account holding status, out of the five factors, viz., occupation of the household head, his / her educational status, SHG leadership experience, percapita income of the household, and total household possession of land, only education of the head, percapita income and household land holdings in case of household deposit account holding status and household total land holding alone for credit account holding status significantly influence the household's account holding status. Since the per capita income of the household has the biggest co-efficient it influences the household's deposit account holding status the most.

Apart from the above mentioned factors, the 'distance of the bank from the place of residence' showed a negative association with the individuals deposit and credit account holding status. Higher numbers of accounts were in existence in the banks that were nearer to their residence. Individuals deposit and credit account holding status is a negative function of distance of bank from ones residence. However this could not be tested for a simultaneous effect along with other variables because the information about distance of bank from individuals residence, is not available for those who have no accounts in bank.

In the process of the analysis it was found that many credit account holders, own a deposit account just to have access to formal credit. Since deposit account holding is a necessary condition for accessing formal credit, many have opened deposit account and have kept it idle without transactions.

The analysis of micro data also shows that there is certainly considerable impact of experience of micro-credit SHGs on individuals and household banking habits. It showed that the regions with higher experience in micro-credit operations would have higher exposure to banks. Larger numbers of SHG members are found to be in possession of bank deposit accounts in the more experienced village. Moreover most of them among SHG members who are in possession of deposit accounts have opened the same only after joining SHGs and this pattern is found in a higher proportion in Pottapatty, a more experienced village.

It is good to realize that SHGs have inculcated banking habits. So banking habit is a positive function of years of experience of micro-credit programs in that particular area. The analysis also revealed that just being a member in SHGs doesn't shape his / her banking habits as much as the leadership experience in SHGs does. The leadership experience in SHGs would brighten an individual's banking habits much more than that of a person who is just a member of SHG.

Lastly it is evident from the analysis of survey data that the micro-credit programs through SHGs have decreased the dependence of people from the exploitative moneylenders. Most of them, who were borrowing from moneylenders for a higher rate of interest, stopped transactions with them after joining the SHGs.

Policy Suggestions

On the basis of our results we can suggest that more and more micro-credit programs through SHGs should be encouraged. This would enhance the effective credit disposal to the poor and inculcate banking habits in them so that they can tackle their frequent risks.

Secondly, the leadership position of each group should be systematically rotated over appropriate time periods, such that each one in the group will experience the leadership position, which gives more exposure to the people on formal banking system and further inculcate banking habits at a higher magnitude.

APPENDIX I

**Short-Term & Long-term Loans for Agriculture & Allied Activities
By Formal Financial Institutions [Amount in Rs. crores]**

Year	Short-term		Long-term		Total Bank Credit
	Amount Out-standing	% to Total Bank Credit	Amount Out-standing	% to Total Bank Credit	
1973-74	985	13.3	1420	19.2	7399
1974-75	1150	13.1	1615	18.4	8762
1975-76	1376	12.7	1772	16.3	10877
1976-77	1167	8.9	2160	16.4	13173
1977-78	1894	12.7	2520	16.9	14939
1978-79	2299	12.9	2908	16.3	17795
1979-80	2646	12.3	3568	16.6	21537
1980-81	3367	13.3	4289	16.9	25371
1981-82	4237	14.3	4862	16.4	29682
1982-83	3685	10.4	5995	16.9	35493
1983-84	4339	10.5	7185	17.4	41294
1984-85	5006	10.2	8670	17.7	48953
1985-86	5858	10.4	10377	18.5	56067
1986-87	6236	9.9	11645	18.4	63308
1987-88	7342	10.4	13742	19.5	70536
1988-89	8561	10.1	15239	18.0	84719
1989-90	9527	9.4	18160	17.9	101453
1990-91	10002	8.6	19313	16.6	116301
1991-92	11126	8.9	20723	16.5	125592
1992-93	13713	9.0	22512	14.8	151982
1993-94	12952	7.9	24037	14.6	164418
1994-95	14360	6.8	24691	11.7	211560
1995-96	17793	7.0	28226	11.1	254015
1996-97	20009	7.2	30911	11.1	278401
1997-98	21469	6.6	32949	10.2	324079
1998-99	23521	6.4	33885	9.2	368837
1999-00	26387	6.1	36220	8.3	435958

Source : RBI, Hand-Book of Statistics on Indian Economy, 2001

APPENDIX II


**Movement in Ratio of Credit to Deposits and Rural Bank Offices
(Three yearly average)**

Period	Credit-Deposit Ratio (Total)	Credit-Deposit Ratio (Rural)	Bank Offices	
			Rural	As a % to Total
1969-71	72.95	43.08	1443 @	17.6 @
1972-74	69.71	50.76	5915	36.1
1974-76	74.26	53.97	7382	35.9
1976-78	72.10	54.41	10659	39.8
1978-80	68.20	56.83	14272	44.4
1980-82	67.84	59.54	19063	50.3
1982-84	67.85	64.38	23650	52.7
1984-86	64.09	65.73	28216	54.4
1986-88	61.90	64.32	30642	56.0
1988-90	64.36	62.72	33360	57.2
1990-92	60.79	58.25	35100	58.1
1992-94	59.15	55.72	35299	57.6
1994-96	59.48	49.54	34493	55.3
1996-98	57.81	44.98	32952	51.0
1998-2000	55.36	41.13	32789	49.3

Note : @ The data pertains only to one year i.e., 1969 and not a three year average.

Source : RBI, Basic Statistical Returns, 1969-2001

**APPENDIX III
QUESTIONNAIRE**

Qnre. No.	Centre for Development Studies M. Phil Programme in Applied Economics, 2001 – 2003 Questionnaire for Field Survey Impact of Self Help Groups on Formal Banking Habits	
-----------	--	---

Date : _____

Investigator : Mahendra Varman

I Family Particulars

(1). Name of Head of the House Hold _____

(2). Address _____

(3). Religion

Hindu	Christian	Islam	Others

(4). Caste

SC / ST	OBC	OC
---------	-----	----

SL No	Name of Members in the House hold (5)	Sex * M: 1 (6) F : 0	Age in Years (7)	Employment Status * Employed: 1 Else : 0 (8)	Organisation in which person is employed * (9)	Kind of Laborer * (11)	Educational Qualification * (12)	Income per Month in Rs. (13)
1								
2								
3								
4								
5								
6								
7								
8								

* Fill up according to the Codes allotted

II Economic Status

(a) (14) **Household Assets**

Existing household Assets	Quantity
Grinder	
Cot / Table / Chairs	
Cupboard	
Fan	
Refrigerator	
Television	
Telephone	
Sound system	

(b) (15) Landed Assets

Items	Homestead Land	Pond / Orchard Groves ...	Own land for own Cultivation	Rented & Share Cropped	Other Land assets	Total
Acres						

(c) (16) Transport Assets

Owned Automobiles	Cycle / Motor Bike/ Other 2 Wheelers	Auto rickshaw/ Van/ Maxi cabs	Hand cart/ Bullock cart	Car / Mini bus/ Lorry	Others Transport Items
Quantity					

(d) (17) Agricultural Equipment and Live stock

Equipment	Quantity
Tractor	
Well for Irrigation	
Motor Pumps	
Compressor	
Draft cattle	
Dairy Cattle	
Poultry and Other Live stock	

III Housing Particulars(18). House Ownership : Owned / Rented

Type of house * (19)	Cement Roof	Thatched Roof	Others Specify:		
No. of Rooms in house (20)					
Is the house electrified Yes:1, No:0 (21) *					
Source of drinking water * (22)	Own Well	Govt. pipes in streets	Home pipe	Pond	
	If Others, Specify:				
No. of times you cook per day (23)		Morning	Noon	Night	
How many full meals you take per day (24)		Morning	Noon	Night	
Type of toilet / bathroom in use * (25)	Private Latrine	Open Field	Others Specify:		
Type of Floor	Cement	Tiles	Mosaic	Mud	

* Fill up according to the Codes allotted

IV Particulars of Banking Habits

Have any of your family members are in possession of accounts in Banks.

Yes / No

If Yes, Then Details about (i) Deposit Accounts

Sl. No.	Name (26)	Bank Name (27)	No. of Savings Account (28)	No. of Current Account (29)	No. of Time Deposits (30)	Total No. of Accounts (31)	Since When (32)	Distance of Bank from place of residence in Kms (33)	Who Introduced You to Bank * (34)	How many Times In the Last 3 Months (35)		Any [DD, MT,] other [Payment] Transactions in Last 3 Months (36)	Who usually Operates the A/C * (37)
										Deposited	Withdrawn		
1		i											
		ii											
		iii											
2		i											
		ii											
		iii											
3		i											
		ii											
		iii											
4		i											
		ii											
		iii											
5		i											
		ii											
		iii											

* Fill up according to the Codes allotted

Details about (ii) Credit Accounts

Sl. No.	Name (38)	No. of A/Cs (39)	Bank Name (40)	Since When (41)	Distance of Bank from place of residence in Kms (42)	Who Introduced You to Bank (43) *	Amount of Loan Taken (44)	Amount Balance (46)	Who (45) usually Operates the A/C *	Purpose of Loan (47)
1			i ii iii							
2			i ii iii							
3			i ii iii							
4			i ii iii							
5			i ii iii							

* Fill up according to the Codes allotted

48. Is any one of your households a member of any micro-credit SHG ?

Yes / No

If Yes to Question No. 48, Then List

Sl. No	Name (49)	Sex (50)	Age (51)	Date of Joining SHG (52)	Were U in a position of transacting group a/c any time (53)	Duration In Months or Years (54)	Do U have a bank a/c (55)		After or Before joining SHG (56)	Who introduced U to Bank (57)
							Dep	Cdt		

(58). Have you Taken Loan for the past _____ Years ? Yes / No

If Yes , Then give Details.....

Date (59)	Loan Amount (60)	Source (61)	Before / After joining SHG (62)	Purpose (63)

BIBLIOGRAPHY

- Adams.D.W & Von Pischke.J.D (1992), "Micro-enterprise credit programs : Déjà vu", *World Development*, Vol.20, No.10
- Agarwal K P, Puhazhendhi V and Satyasai K J S (1997), "Gearing rural credit for the twenty first century", *Economic and Political Weekly*, Oct 18, pp. 2717 – 2727.
- Atiur Rahman & Abdur Razzaque (2000), "On reaching the hard core poor : Some evidences on social exclusion in NGO programmes", *The Bangladesh Development Studies*, Vol.26, No.1, pp. 1-35
- Buckley GRAEME (1997), "Micro-financing in Africa : Is it either the problem or solution ?" *World development*, Vol.25, No.7
- Census of India (1991), "Population Projections for India & States, 1996 –2016".
- Census of India (2001), "Provisional Population Tables" also refer website www.censusindia.net
- Dadhich C. L. (2001), "Micro Finance – A panacea for poverty alleviation : a case study of oriental Grameen bank project in India", *Indian journal of Agricultural Economics*, Vol. 56, No. 3, July – Sep.
- David Hulme and Paul Mosley (1996), "finance against poverty", volume I & II, Outledge publications, London & New York.
- Dhan Foundation (1998), "Banking with SHGs", Resource and research Centre.
- Eckart Oehring (1995), "credit Guarantee Scheme for the Small Business Sector", New perspective on financing small business in developing countries, ICS press.
- Eduardo Lizano & Luis Mesalles (1995), "Access of small enterprises to conventional sources of financing : The case of Bolivia, Chile, Colombia and Peru" New perspective on financing small business in developing countries, ICS press.
- Elisabeth Rhyne & Maria Otero (1995), "Financial services for microenterprises : Principles and institutions", New perspective on financing small business in developing countries, ICS press.
- Eric. L. Hyman & Krik Dearden (1998), "Comprehensive impact assessment systems for NGO microenterprises development programs", *World Development*, Vol.26, No.2.
- Fernando Romero C (1995), "Banking services for the poor", New Perspectives on financing Small Business in Developing Countries, ICS Press Publishers.

- Gadgil M V (1997), "National Bank for Agricultural & Rural Development, Promise and Performance, 1982-83 to 1995-96", *Journal of Indian School of Political Economy*, Vol. 9, No. 2, pp. 207-265
- Hamilton Lawrence C (1992), "Regression with Graphics : A Second Course in Applied Statistics, California
- Hamilton Lawrence C (2003), "Statistics with STATA - Updated for Version 7", Duxbury Press.
- Hashemi, Syed M., Sidney Ruth Schuler, and Ann P. Riley (1996). "Rural Credit Programs and Women's Empowerment in Bangladesh"; *World Development*, Vol. 24, No. 4, pp. 635-653.
- Hlume.D (2000), "Impact assessment methodologies for micro-finance: Theory, experience & better practice", *World development*, Vol.28, No.1, Jan refer <http://www.ilo.org/public/english/protection/ses/download/docs/2india.pdf>
- Ilja Kristian Kavonius & Eeva Hamunen (2002), "Measuring Savings, Assets, and Liabilities: From Macro and Microeconomic Perspectives", Paper prepared for the 27th General Conference of the International Association for Research in Income and Wealth, Sweden, 18 to 24 August, Refer Website ; <http://www.iariw.org/papers/iariwholding.pdf>
- Jaya S Anand (2002), "Self help groups in empowering women : Case study of selected SHGs and NHGs", Kerala Research Programme on Local Level Development, Discussion PaperNo.38, Centre for Development Studies, Kerala, India
- Kaladhar. K (1997), "micro Finance in India ; Design, Structure and governance", *Economic and Political Weekly*, Oct 18, pp. 2687 – 2706.
- Krishna Raju.S (1992), "Bank finance and rural development", Discovery publishing house, New Delhi.
- Kulkarni P B (1994), "Banking sector reforms", *Journal of Indian School of Political Economy*, Vol. 10, No.4, Oct – Dec, pp. 663 – 683
- Kumaran. K.P (2001), "Self help groups of the rural poor in India : An analysis", *National Bank News Review*, Apr – June, pp. 31 – 37.
- Leila. M . Webster, Randall Riopelle, and Anne Marie Chidzero (1996), "World bank Lending for Small Enterprises", *World Bank Technical Paper*, No. 311, The World Bank, Washington D. C.
- Lekshmi R Kulshreshtra and Archana Gupta (2002), "A study of micro finance in India – Deliver system and Impact Analysis with special emphasis to women upliftment", *SAJOAPS*, July – Dec, pp. 104 – 111

- Leland, H.E. and Pyle, D.H. (1977): "Informational asymmetries, financial structure and financial intermediation", *Journal of Finance*, vol. 32, no.2, pp. 371-387.
- Loic Sadoulet (2002), "Incorporating insurance provisions in micro finance contracts, Learning form Visa ?", *WIDER Discussion paper* No. 2002 /50, UNU / WIDER.
- Madheswaran. S & Amita Dharmadhikary (2001), "Empowering rural womwn through SHGs : lessons from Maharashtra rural credit project", *Indian journal of Agricultural Economics*, Vol. 56, no. 3, July – Sep. pp. 427 – 443.
- Majumdar N. A (1997), "Overhauling the somnolent rural credit system", *Economic and Political Weekly*, Oct 18, pp. 2707 – 2710
- Margurite S Robinson (1995), "Indonesia; The Role of Savings in Developing Sustainable Commercial Financing of Small and Micro Enterprises" New perspective on financing small business in developing countries, ICS press.
- Margurite S Robinson (2001), "The micro-finance revolution : Sustainable finance for the poor", The World Bank, Washington D C
- Mark.M.Pitt (2000), "The effect of non-agricultural self-employment credit on contractual relations and employment in agriculture; The case of micro-credit programs in Bangladesh", *Bangladesh Development Studies*, Vol.26, No.2 & 3, June-Sep.
- Mark Schreiner (2001), "Measuring Savings" Refer Website ;
http://www.microfinance.com/English/Papers/Measuring_Savings.pdf
- Martin Patrick and Muralidharan S (2002), "Dynamics of Micro-Enterprises: realities Explored", International Seminar on Income Generating Activities – Proceedings, Cochin University of Science and Technology, India
- Mohandas M (2002), "Impact of Micro-Finance on the income Generation of the Poor" International Seminar on Income Generating Activities – Proceedings, Cochin University of Science and Technology, India
- Mohanty. B B (1997), "Linkage banking and micro-finance in India", *National Bank News Review*, Vol. 13 No.1, pp. 31-32. January-March
- Morduch.J (2000), "The micro-finance schism", *World development*, Vol.28, No.4, April.
- Mosley Paul and Hulme David (1998), "Micro enterprise finance: Is there a conflict between growth and poverty alleviation ?" *World Development*, 26(5) PP 783-790.

- Muhammad Abdul Latif (2001), "Micro-credit and savings of rural households in Bangladesh", *The Bangladesh Development Studies*, Vol.27, No , March.
- Muhammad Yunus (2000), "How donor funds could better reach and support grassroots' micro-credit programmes : Working towards the micro-credit summit's goal and core themes", *The Bangladesh Development Studies*, Vol. 26, No. 2 & 3, June-Sep. Special Issue
- NABARD (2002), "Ten Years of SHG – Bank linkage; 1992 – 2002", *NABARD and Micro Finance*.
- Namboodiri.N.V & R.L.Shiyani (2001), "Working and impact of rural self-help groups in rural financial deepening", *Indian journal of agricultural economics*, Vol.56, No.3, July-Sep
- Nanda.Y.S, () "Significance of establishing linkages with Self-Help groups and Banks", NABARD, India, refer Web <http://www.gdrc.org/icm/nanda-link.html>
- Nanno D Kleiterp (1995), "Financing Banks for Small Enterprenure Development" New perspective on financing small business in developing countries, ICS press.
- Narayana D (2003), "why is the credit-deposit ratio low in Kerala ?" WP No. 342, Centre for Development Studies.
- Narayana.D (2000), "Banking sector reforms and the emerging patterns in commercial credit deployment in India", *Review of Development and Change*, Vol.5, No.2 July-Dec.
- National Sample Survey Organization (1999-2000), Socio-Economic Survey, 6th quinquennial & 55th Round
- Pillai P P and Lakshmy Devi K (2002), "Micro Credit Programmes, Income generation and Empowerment of Women : Some Emperical Evidence", International Seminar on Income Generating Activities – Proceedings, Cochin University of Science and Technology, India.
- Prakash tandon (1990), "Development of Banking in India", *Journal of Indian School of Political Economy*, Vol. 2, No.1, Jan – Apr
- Puhazhendhi V and Jayaraman B (1999), "Rural credit delivery : performance and challenges before banks", *Economic and Political Weekly*, Jan 16-23, pp. 175-192.
- Rajaram Dasguptha (2001), "Working and impact of rural self help groups and other forms of micro-financing ; An informal journey through self-help groups", *Indian journal of agricultural economics*, Vol.56, No.3, July-Sep.

- Rajasekhar. D (2000), "Micro Finance programmes and women's empowerment : A study of two NGOs, from Kerala", *Journal of Social and Economic Development*, Vol. 3, No. 1, Jan – June, pp. 76 – 94
- Ramachandran V K nad Madhura Swaminathan (2001), "Does informal credit provide security ?" Rural banking policy in India, International Labour Office, Geneva. Refer Website –
- Raviraman K (2002), "Seeds of Hope, Reason for Despair: A Conceptual Critique of Women's Self Help Groups", International Seminar on Income Generating Activities – Proceedings, Cochin University of Science and Technology, India.
- Report of the Banking Commission, 1972 (Chairman R G Saria), *Journal of Indian School of Political Economy*, Vol. 9, no. 2, Apr-June, 1997, pp. 309-359
- Samar.K.Datta & M.Raman (2001), "Can heterogeneity and social cohesion co-exist in self-help groups ? An evidence from group lending in Andhra Pradesh in India", *Indian journal of agricultural economics*, Vol.56, No.3, July-Sep
- Sathish.P (2001), "Some issues in the formation of SHG's", *Indian journal of agricultural economics*, Vol.56, No.3, July-Sep
- Senanayake S M P and Ho D P (2002), "Who have more access to cheap credit in Vietnam?" *India Journal of Agriculture Economics*, vol. 57, No. 2, Apr – June, pp. 241 – 245.
- Sergio Navajas. et.al.(2000), "Micro-credit and the poorest of the poor: Theory and evidence from Bolivia", *World development*, Vol.28, No.2, Feb
- Shahidur.R.Khandker (2000), "Savings, Informal Borrowings and Micro-finance", *Bangladesh Development Studies*, Vol.26, No2 & 3, June-Sep
- Shajahan k M (1999), "Priority sector bank lending : How useful ?" *Economic and Political Weekly*, Dec 18, pp. 3572 – 3574
- Sham.K.Bhat, V.Nirmala & N.Ranjini (2000), "Impact of Financial Reforms on the banking sector in India", *Journal of Institute of public enterprises*, Vol.23, No.1
- Shetty.S.L (2002), "Working and impact of rural self help groups and other forms of micro financing", *Indian journal of agricultural economics*, Vol.57, No.1, Jan-Mar
- SPSS (1999), *Regression Models* ^{JM} 9.0, Special Issue.
- Tara. S. Nair (2000), "Rural financial intermediation and commercial banks : Review of recent trends", *Economic & Political Weekly*, Jan 29.

Timothy. W. Guinnane (2000), "Delegated monitors, large and small : Germany's banking system, 1800-1914", *Journal of Economic Literature*, Vol. XL, March.

Vijay K Bhasin and Wisdom Akpalu (2001), "Impact of Micro Finance Enterprises on the Efficiency of Micro Enterprises in Cape Coast", IFLIP Research Papers 01-5, ILO, Refer Website ;
<http://www.ilo.org/public/english/employment/finance/download/fslwp5.pdf>

Vinod Vyasulu & D.Rajasekhar (1991), "Rural credit system in the 1990's", Working Paper, ISEC, Bangalore

Youssoufou Congo (2002), "Performance of micro finance institutions in Burkina Faso", *WIDER Discussion Paper* No. 2002 / 01, UNU / WIDER.

