SUMMARY OF THE STUDY

Introduction to Financial Inclusion

India is one of the largest and fastest growing economies of the world and the emerging trends in Financial Inclusion have gained growing attention among developing countries. The recent developments in banking technology have transformed the traditional brick and mortar infrastructure to a system supplemented by technology driven channels like ATMs, debit cards, credit cards, mobile banking, internet banking etc. The important fact however, is that all these facilities are restricted only to certain segments of the society. As a result, there is a growing divide, with an increasing range of financial services for a segment of high and middle income population and a significantly large section of lower income population who lack access to even the most basic banking services. This is termed as ‘financial exclusion’.

Inclusive growth has been a priority of the government of India over past decade. In most of the developing countries like India, financial services are available to minority of the population only. As in most of the developing countries, majority of people do not have savings accounts, do not receive credit from formal financial institutions have no insurance policies etc. They whimsically make or receive payment from formal financial sources. Such limited use of financial services has become an international policy concern. The basic question is why so many bankable people are unbanked? The people who are excluded from formal financial services include creditworthy people who would be able to generate income to repay their borrowings but don’t have access to credit. The largest group of unbanked people is those who want a safe place to park their money and a reliable way to transfer and receive money but don’t have access to banking to services i.e they remain financially excluded.

Financial Inclusion is a key determinant of sustainable and inclusive growth of the country. Building Inclusive Financial sector can improve peoples’ life, particularly of the poor (UN report, 2006). A savings account, a small loan from formal source
or an insurance policy can make a great difference to the low-income group of the society. In many developing countries, small scale enterprise face many financing constraints but with access to formal finance and other banking facilities, they can participate in the economic life of the society, can create employment for themselves and others and can realize their full potential as well.

The deliberations on the concept of Financial Inclusion contributed to a unanimity that merely opening a bank account may not be an indicator of Financial Inclusion rather the idea should focus on people who want to avail financial services but are denied from financial services. Therefore, for narrowing the gap between financially excluded and financially included population, there would be need to re-engineer the existing financial products, delivery system and making the services more in tune with the expectations and absorptive capacity of the intended clientele. Based on the above considerations, broad working definitions of Financial Inclusion have been given as:

*The committee on Financial Inclusion (Chairman Dr. D.C. Rangarajan, 2008) has defined Financial Inclusion as the process of ensuring access to appropriate financial products and services needed by vulnerable groups such as weaker sections and low-income groups, at an affordable cost, in a fair and transparent manner by mainstream institutional players. The objective of Financial Inclusion is to extend financial services to the large previously unserved population of the country to unchain its growth potential. In addition it strives towards a more inclusive growth by making financing available to the poor in particular (RBI).*

*GoI (2008) defined Financial Inclusion as the process of ensuring access to appropriate financial services and timely & adequate credit where needed by vulnerable group such as weaker sections and low income groups at an affordable cost.*

Towards Financial Inclusion, Government policies as well as RBI have laid a strong foundation wherein technology has helped to spread the reach of financial services. Technology solutions such as ATMs, mobile phone applications etc. have contributed a lot towards achieving the goal of Financial Inclusion. Banking and financial institutions are constantly being engaged in making available banking
services to the financially unserved population by using technology however the needs of vast majority of the targeted population have not yet been met. Therefore, technology solutions are being promoted to address the scalability challenges facing Financial Inclusion.

**Objective of Financial Inclusion in India**

FI has been formulated with the main objective of providing basic financial services (such as bank account) and bringing more and more people under the ambit of banking and financial services. The policy makers have been focusing on FI in rural and semi urban areas primarily for

- Providing formal credit channels: as so far, the unbanked population still depends on friends, family, moneylenders etc. for meeting their financial needs. Availability of adequate and transparent credit from formal banking channels will help the lower income masses to increase their outputs and help them meeting their financial needs in a better way.

- Creating a platform for indoctrinate the habit to save money: due to the absence of saving habit of lower income masses, they face financial duress and for overcoming that the presence of banking services proved to be a tool to inculcate the habit of saving and thus boosting FI

- Plug chasm in public subsidies and welfare program: one of the major problems faced by lower income group masses is that the sum of money predestined for them actually does not reaches to them. Government of India therefore has been pushing for direct cash transfers to beneficiaries through their bank accounts instead of subsidizing the products and making cash payments.

**A compendious approach to Financial Inclusion addresses at least three aspects:**

- **Access-** with expanded access to formal financial services, people would be able to adopt new financial services and products from formal institutions. Access indicators reflect the depth of outreach of financial services such as penetration of bank branches.

- **Usage-** usage refers to the regularity and frequency of adoption of financial services and products by the people like deposits, average savings balances,
number of electronic payments made etc. In order to use financial products, households must have access to them.

- Awareness- awareness relates to the degree to which consumers can be benefitted from financial services. Informed and financially educated people will be benefitted more from financial services and will be able to access the risks associated with the financial products more accurately.

**Literature Review**

Allen N. Berger and David B. Humphrey (1997) analyzed 130 studies of financial institutions of 21 countries. The studies used efficient frontier analysis and found that the efficiency estimates of non parametric studies i.e. DEA and FDH were similar to that of parametric studies i.e. SFA, DFA and TFA. Although, depository financial institutions (banks, credit unions etc.) in the selected 130 studies have experienced an average efficiency of around 77 percent, the mean efficiency estimates of parametric methods were low when compared with the results of non parametric models. Moreover, in terms of applications of efficiency analysis, research on financial institutions largely focused on using institution efficiency estimates: to inform government policy, to address research issues and to improve managerial performance.

V. Leeladhar (2005) found that providing banking to the bottom of the pyramid section of the society may not be profitable but relatively low margins on high volumes can be very profitable. The author studied that there is need to reframe the existing business strategies and incorporate plans to promote Financial Inclusion of lower income group by the banks. Furthermore, all the available resources like technology must be exploited to the full possible extent to meet the objective of Financial Inclusion.

S. Mahendra Dev (2006) studied the importance of Financial Inclusion in improving the status of Rural and vulnerable section of the society and discussed important issues and challenges of Financial Inclusion in India. The concept of Financial Inclusion covers wider financial services such as credit, savings, insurance, etc. It has been found that financial exclusion is high for small and marginal farmers and some social groups in terms of access to credit by formal financial sources means.
Supply and demand problems have to be solved with appropriate policies and Financial Inclusion should be looked both as a business opportunity as well as social responsibility. The risk elements of small and marginal farmers and other vulnerable groups have to be taken into account in farming policies for Financial Inclusion. For improving the productivity of small and marginal farmers and other vulnerable groups have to be taken into account in improving the skills of rural non-farm workers, the banking system may have to undertake credit plus advisory services.

K.G.K Subba Rao (2007) highlighted the features of decennial household surveys on debt and investment conducted by National Survey Organization and the periodical surveys on small borrowal accounts conducted by RBI. The study has also shown the reliance of households on institutional and non-institutional sources of finance. The study analyzed the pattern of debt of rural and urban households as reflected in the decennial All India Debt and Investment Surveys (AIDIS) conducted by NSSO. Also, credit policies and developments in the banking sector in terms of enhancing the flow of institutional credit to priority sector have been reviewed.

N.Sundaram and M.Sriram (2008) studied empirically the determinants of Financial Inclusion in rural regions of Vellore district of Tamil Nadu. The author studied the reasons for not having bank accounts. Analytical research design has been used and primary data has been collected from 20 village blocks. The study, with the help of percentage analysis and Index of Financial Inclusion (framed on the basis of a multidimensional model developed by Sarma (2012)) found that Financial Inclusion was at a mid range (0.55) for the selected area, which needs progression and major reasons for lack of financial access were low income, illiteracy and unemployment.

Minakshi Ramji (2009) found that during the Financial Inclusion drive in Gulbarga district of Karnataka, though 100 percent Financial Inclusion has been claimed but it has found that bank accounts have been opened under NREGP rather than the Financial Inclusion program, as a result of which usage and awareness of bank accounts remained low. However, out of the sampled population 36 percent remained excluded from any kind of saving accounts. The study found that there is need of financial literacy for the optimal utilization of bank accounts once after opening them.
Mansira Sharma and Jesim Pias (2010) have attempted a cross country study on factors associated with Financial Inclusion. Using an index of Financial Inclusion (Sarma, 2008), first describe the broad relationship between Financial Inclusion and human development. Then they find that level of human development and that of Financial Inclusion are strongly positively correlated, although few exceptions exist. Empirical analysis confirmed that income when measured by per capita GDP has been found to be an important factor in explaining the level of Financial Inclusion in a country. Additionally, going beyond per capita GDP, it was found that income inequality, adult literacy and urbanization were also important factors. Further, physical and electronic connectivity and information availability, indicated by road network, telephone and internet usage, also played impressive as well as positive role in enhancing Financial Inclusion. The findings of the study strengthened the assertion that financial exclusion is indeed a reflection of social exclusion, as the countries having low GDP per capita, relatively higher levels of income inequality, low rates of literacy, low urbanization and poor connectivity seemed to be less financially inclusive.

Nitin Kumar (2011) studied the inclusion intensity and inclusion growth across the states of India by using DEA. The author studied the performance of postal network in India as a medium of financial intermediary in general and operation of basic savings specifically. The results of empirical analysis showed that although there has been continuous rise in both population and number of postal saving accounts still there was no significant improvement in the postal network as reflected by accounts per capita and savings per capita over the study period i.e. from 1990 to 2008, across 18 major states of India.

Satya R. charavarty (2012) designed an index, using the axiomatic approach to measure Financial Inclusion and demonstrated that the estimates of the index based on the supply side information of financial services can be interpreted as estimates of Financial Inclusion across states and over time. The index values has shown that overall economic development of a region was positively associated, whereas dependence on agriculture and other allied activities was negatively associated with the level of Financial Inclusion.
Dr. K.C. Chakrabarty (2012) focused on various aspects of Financial Inclusion such as approaches towards Financial Inclusion, conceptual framework for measurement and analysis of Financial Inclusion, international initiatives in measuring Financial Inclusion and Indian perspective. It was found that the bank penetration in India (35%) is less as compared to China (63.8%). South Korea reported high penetration (93%). However from March 2010 to June 2012, bank connectivity has shown positive growth and increased the connectivity to 1,88,028 villages from 67,694 and number of BCs increased to 120,098 from 34,532. As per the study about 36 million people have been credit-linked.

Dr. K.C. Chakraborty (2013) emphasized that recent census of India indicated that only 58.7% of households in India have been availing the banking services with the figure being 54.4% for rural areas and 67.8% for urban areas. The author highlighted on the fact that opening of bank accounts was only the first stage and the focus now should not be just on improving access but also on better use of financial infrastructure. In this regard, the collaborative approach combining Financial Inclusion with financial literacy, along with closer monitoring of progress in transactions, has been expected to boost operations in Financial Inclusion.

A. Tamilarasu (2014) studied the role of banking sector on Financial Inclusion development and concluded that the total number of bank offices have been increased in all the areas of India, thereby implying increased Financial Inclusion status during 2008-13. Also, the aggregate deposits and credits granted by banks and number of ATM machines installed have increased during 2008-13. The study also concluded that mere opening of bank accounts was not the purpose of Financial Inclusion but formal financial institutions must gain the goodwill of people. This can be done by developing strong linkages with community based financial ventures and cooperatives as still a large population have no access to formal financial sources and depend upon moneylenders to meet their financial needs.

Pankaj Baag and Vinay Kandpal (2015) studied various initiatives taken by RBI to improve Financial Inclusion in India. The author studied various policies and principles regarding Financial Inclusion and the G-20 principles of Financial Inclusion expert group, 2014. The study concluded that as a result of policy
initiatives, a total of 2.2 million people were educated through indoor education to walk in process and through outdoor activities. In case of technology, banks including RRBs were migrated to core banking system (CBS) and in 2011 developed an inbuilt capacity to provide remittances using electronic payment system.

**Objectives of the Study**

1) To study the steps taken by RBI and Government of India to promote Financial Inclusion in India

2) To study the status of Financial Inclusion in India

3) To study the awareness level Financial Inclusion between urban and rural masses of lower income group

**Research Hypotheses**

$H_{01}$ - there is no significant difference in the branch penetration of scheduled commercial banks in the rural, semi urban, urban and metropolitan areas during the study period

$H_{02}$ - there is no significant difference in the deposit penetration of scheduled commercial banks in the rural, semi urban, urban and metropolitan areas during the study period

$H_{03}$ - there is no significant difference in the credit penetration of scheduled commercial banks in the rural, semi urban, urban and metropolitan areas during the study period

$H_{04}$ - there is no significant difference in the productivity of scheduled commercial banks in the rural, semi urban, urban and metropolitan areas during the study period

$H_{05}$ - there is no significant difference in the awareness level of rural and urban masses of lower income group regarding general awareness

$H_{06}$ - there is no significant difference in the awareness level of rural and urban masses of lower income group regarding savings

$H_{07}$ - there is no significant difference in the awareness level of rural and urban
masses of lower income group regarding borrowings

H_{08}^- there is no significant difference in the awareness level of rural and urban masses of lower income group regarding other financial services

**Organization of the Study**

The study has been organized as follows:

**Chapter 1**  Introduction

**Chapter 2**  Review of Literature

**Chapter 3**  Research Methodology

**Chapter 4**  Steps taken by RBI and Government of India towards Financial Inclusion

**Chapter 5**  Status of Financial Inclusion of India

**Chapter 6**  Awareness level of urban and rural masses of lower income group

**Chapter 7**  Major Findings, conclusion and Suggestions

**Sampling technique and sample size for the present study**

For studying the status as well as growth of Financial Inclusion, time period of 8 years have been taken (2005 to 2013). The time frame has been taken from the starting of Financial Inclusion as a policy issue by RBI (2005) to the ending of first 3-year Financial Inclusion Plan (FIP) (2013). For primary data, a total of 500 customers have been selected i.e. 100 customers from each district viz. Kaithal, Ambala, Panchkula, Kurukshetra and Yamunanagar.

Selection of districts: In Haryana, total districts have been categorized into 4 divisions for administrative purpose by state level bankers’ committee. The 4 divisions are namely 1) Ambala division 2) Gurgaon division 3) Hisar division and 4) Rohtak division. All the five districts of Ambala division have been taken for the present study.

**Data Collection**

Data has been collected from both primary and secondary sources. The main techniques used for primary data collection were questionnaire and interviews.
Primary data has been collected from the rural and urban people of lower income group (people those incomes is between 1 Lac to 2 Lac per annum, as per government of India). Semi-structured questionnaire has been formulated on the basis of World Bank survey on Financial Inclusion. A pretest was also carried out to finalize the questionnaire and necessary additions/deletions/corrections were made as per the requirements of the objective of the study.

Secondary data has been collected from RBI reports, CRISIL report, World Bank survey reports, Government of India population census, NSSO survey results, NABARD reports and various research journals.

**Data Analysis**

- **Geometric mean:** geometric mean is a type of mean or average which indicates the central tendency or typical value of a set of numbers by using the product of their values. In the present study geometric mean of branch penetration, deposit penetration and credit penetration has been calculated.

- **Standard deviation:** in statistics, standard deviation measures the amount of variation or dispersion from the average. A low standard deviation indicates that the data points tend to be very close to the mean, a high standard deviation indicates that the data points are spread out over a large range of values.

- **Level of significance:** Level of significance is the probability of the rejection of null hypothesis. Generally two levels 5% and 1% are considered to verify the null hypothesis and the same would be retained for the proposed research project. Therefore the level of significance considered for all statistical decisions are .05.

**Compound growth model**

Compound annual growth rates of some of the variables under consideration were also calculated. It is an average growth rate over a period of time CAGR was calculated by using following formula:

\[
CAGR = [AL \left\{ \sum \log X/n \right\}]-100
\]

Where, AL= Anti-logarithm

Log X= log of the performance index of concerned variable at base 10, 
n = number of years
• **ANOVA (F-test)**

Analysis of variance is a statistical technique with the help of which the total variation of the data is split up into various components which may be attributed to various “sources” or “causes” of variation. There may be variation between the samples and also within the samples. By comparing the variance between the samples and variance within the sample, analysis of variance helps in testing the homogeneity of several population means. The analysis of variance is essentially a procedure for testing the difference between different groups of data for homogeneity. For measuring the results p-value approach has been used. SPSS version 20 has been used for calculating the results of ANOVA.

• **The Chi-Square ($X^2$) test**

The chi-square test is a nonparametric test. The term "non-parametric" refers to the fact that the chi-square tests do not require assumptions about population parameters nor do they test hypotheses about population parameters. This test can be used in two ways: the chi-square test for goodness of fit and the chi-square test for independence. The chi-square test for goodness-of-fit uses frequency data from a sample to test hypotheses about the shape or proportions of a population. The chi-square test for independence can be used and understood in two different ways: (i) Testing hypotheses about the relationship between two variables in a population, or (ii) Testing hypotheses about differences between proportions for two or more populations. In other words it is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. It can be applied on frequencies rather than numerical scores. The null and research hypotheses for the $X^2$ nonparametric test are stated as follows:

$H_0$: There is no compelling difference between the observed (O) and expected (E) frequencies.

$H_1$: There is a powerful difference between the observed (O) and expected (E) frequencies.
**Chi-Square test**

<table>
<thead>
<tr>
<th>Cases</th>
<th>Values</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$p \text{ value } \geq \alpha (0.05)$</td>
<td>Accept $H_0$</td>
</tr>
<tr>
<td>2</td>
<td>$p \text{ value } &lt; \alpha (0.05)$</td>
<td>reject $H_0$</td>
</tr>
</tbody>
</table>

**Mann Whitney U test**: It is a non-parametric test which is used to compare two population means. This test is also used to test whether two population means are equal or not. Mann Whitney U test is the alternative test to the independent sample t-test and is used for equal sample sizes. This test has been used to determine if there was difference between two groups. Usually Mann Whitney U test is used when data is of ordinal nature. As this test is a non parametric test, hence it does not assume any assumptions related to the distribution.

**Data Envelopment Analysis**: the study employed Data Envelopment Analysis (Henceforth, DEA) to calculate the inclusion intensity of states of India from 2005 to 2013. DEA is a non parametric method used for comparing the efficiencies of various Decision Making Units (Henceforth, DMUs). The definition of DMU is flexible i.e. they can be individuals, branches of an organization, entire organization etc. (which in this study were 31 States of India). DEA is a non linear programming method in operation research and economics for the estimation of production frontiers. The estimated frontiers represent the best practices boundary corresponding to the optimal utilization of resources. Farell (1957) was the first to exposition the methodology in an influential article and the methodology was further extended by Charnes et al. (1978). As per the methodology, if a DMU lies on the frontier, it is referred to as an efficient unit, otherwise labeled as inefficient. The data in this methodology are enveloped in such a way that radial distances to the frontier are minimized. The DEA can be carried out in two ways by assuming either Constant Returns to Scale (CRS) or Variable Returns to Scale (VRS). The estimation of these two assumptions allows the overall technical efficiency. However, various approaches to efficiency and productivity analysis have been utilized in the production economics (Banker et al., 1984; Coelli et al., 2005). As per the production theory parlance efficiency is defined as the gap between the best practices frontier and the actual level of performance of a DMU.
With this milieu, financial intensity in the present context is defined as the level of Financial Inclusion of a region compared to the optimal frontier, has been estimated using the piecewise linear combination of the actual input-output correspondence set that enveloped the data of all the states in the sample (Kumar, 2011). The study utilized BCC (Banker et al., 1984) methodology, which allows for Variable Returns to Scale. The efficiency of each DMU has been estimated as maximum of ratio of weighted outputs to weighted inputs. The problem has been formulated as follows:

\[ E_K = \sum_{m} W_{m} Z_{m} \]

Maximize

\[ \sum_{m} W_{m} Z_{jm} \leq 1 \]

\[ W_{m} \geq 0 \]

\[ Z_{jm} \] denotes the \( m^{th} \) measure of the \( j^{th} \) DMU. \( W_{m} \) is the corresponding weight for the \( m^{th} \) measure. The weights were selected such that each firm obtains the highest possible score. The restriction imposed on the weights was that the resulting score can not exceed unity.

**Malmquist index:** the Malmquist Total Factor Productivity (Henceforth, TFP) index was first introduced in two seminal papers by Caves et al. (1982). In these papers, the authors defined the TFP index using Malmquist input and output distance functions and the resulted index has came to be known as the Malmquist TFP index (henceforth MPI). This Malmquist Approach is the most commonly used approach for output orientation. It measures the TFP changes between the two data points by calculating the ratio of distances of each data point relative to a common technology (time period \( t \)) (Coelli, 2005). As far as this study has been concerned, the implication of productivity growth based on time series can be measured by the MPI as improved efficiency relates to the best performers. In milieu of this, the MPI between time periods \( t \) and \( t+1 \) hs been measured as follows:

\[ M_{t}^{1} = e_{t-1}^{1} \]
From the above equation $\eta_t^I$ and $\eta_{t+1}^I$ denote the input technical efficiency scores for state I that relates observations in periods $t$ and $t+1$ respectively. The growth change between time periods $t$ and $t+1$ were measured by $M_t^I$. As $\eta_t^I$ and $\eta_{t+1}^I$ are efficiency scores which usually lies between zero and unity. Subsequently, these may induce three possibilities as regards Financial Inclusion growth which van be expressed as follows (Fare et al. 1992).

- $M_t^I < 1$ indicates decline in Financial Inclusion growth
- $M_t^I = 1$ implies no change in growth from time $t$ to $t+1$
- $M_t^I > 1$ indicates an increase in Financial Inclusion growth

**Index of Financial Inclusion:** Index of Financial Inclusion (henceforth, IFI) was a comprehensive measure of Financial Inclusion that was able to incorporate information on several aspects (Dimensions) of Financial Inclusion, preferably in one single number (Mandira Sarma, 2008). Such a measure can be used to compare the level of Financial Inclusion in a country over a period of time. Moreover, for constructing such an index, a multidimensional approach has been considered. Further, this approach was similar to that used used by UNDP for computation of some well known indexes such as HDI, HPI, GDI etc. (Sarma, 2012). As far as this study has been concerned, the IFI has been calculated for the period 2005 to 2013 by considering three basic dimensions of an inclusive financial system: Branch penetration, availability of banking services and usage of banking services, as follows:

$$IFI = \sum_{i=1}^{n} w_i D_i$$

Where $w_i$ is the weight of $i^{th}$ dimension and $n$ is the number of dimensions.

In order to compute IFI, first a dimension index has been calculated for each dimension of Financial Inclusion. The IFI is the weighted average of dimension indexes and is calculated as follows:
\[ u_i = \frac{A_i - m_i}{M_i - m_i} \]

Where

\( A_i = \) actual value of dimension \( i \)
\( M_i = \) Maximum value of dimension \( i \)
\( m_i = \) Minimum value of dimension \( i \)

**Steps taken by RBI and Government of India towards Financial Inclusion**

- Statistics revealed that 37.08 percent (37953 out of 102,343) bank branches of scheduled commercial banks have been located in rural areas. While as per the census 2001, there were about 600,000 villages in India and only 37953 rural bank branches available and the Average Population Per Bank Branch (APBB) in India, as on 31.3.2013 was 12,100. But from demand side as per RBI, there were 296 under banked districts in under banked states in the country as on July, 2010 (Table 4.1.1).

- Number of BSBDAs has increased throughout the study period (2010 to 2013). As per the figure 4.2.1, the number of BSBD accounts through branches was 12 percent in 2010 and raised upto 17 percent in 2011, followed by 26 percent and 45 percent in 2012 and 2013 respectively.

- According to the guidelines issued by RBI, banks have been using BC model for deposits, withdrawals, and remittance services and this model helped in providing banking services through banking outlets in every village with population above 2000. ICICI bank has appointed BCs for 393 villages in India and opened more than 40 lac accounts upto 2012.

- As on march 2010, banks had reported that 135 FLCCCs have been set up in various states of the country. State Lead Bank Committee implemented agencies under the RBI and covered the under credit counseling centers in districts level to implement the programs. Accordingly, 718 FLCs has been set up as at the end of March-2013. A total of 2.2 million people have been educated through awareness camps/choupals, seminars and lectures from April 2012 to March 2013.
As on March 2013, the cumulative sanctions under FIF and FITF were 181.64 crores and 365.49 crores respectively, against which, disbursements were 69.67 crores and 201.30 crores respectively. Furthermore, under FIF, the highest sanctions were in the year 2011-12 i.e. 75.96 crores followed by 67.02 crores in the year 2012-13 while the disbursements were more in the year 2012-13 (33.31 crores) as compared to the previous year (18.9 crores in 2011-12). In case of FITF, maximum sanctions as well as disbursements were made in the year 2011-12 (S= 221.07 crores, D= 128.39 crores).

For the first time since the SHG-Bank Linkage program was launched, there was a decline in the number of SHGs savings linked with banks to the extent of 8.1 percent during the year 2012-13, though the savings harnessed by SHGs grew by 25.4 percent (table 4.6.1). The growth in the loans outstanding of SHGs with bank (8.4 percent) was almost four times the growth in the number of SHGs having outstanding loans with banks (2.2 percent) in 2012-13.

Under the Microfinance program no. of loans disbursed by banks by means of Self Help Groups remained same during the three years (2010-13) at 1.2 millions. However on the other hand, the amount of loans disbursed was increased to 206 billion in 2012-13, followed by 165 billion in 2011-12 and 145 billion in 2010-11.

Under the Lead Bank Scheme, pursuant to the announcement in mid term review of the annual policy for the year 2007-08, a high level committee was constituted under the chairpersonship of Smt. Usha Thorat, Deputy Governor, RBI and in view of that, at the end of March 2009, 26 banks (Public and Private sector) were assigned the responsibility of 622 districts of the country. It has been decided to bring all the districts of Metro areas under the Lead Bank Scheme and accordingly during 2012-13, 16 districts in metro areas have been assigned the Lead Bank responsibility.

Number of RRBs in the country as on March 2013 stood at 64, with a network of 17856 branches. However, the branch network of RRBs stood at 16909 and 16001 in 2012 and 2011 respectively, which was less as compared to the successive year. However, till 2013 RRBs covered 635 districts of India. Also,
the deposits of RRBs increased from ₹ 18633 crore to ₹ 21458 crore during 2012-13, registered growth rate of 13.48 percent.

➢ In India, it was estimated that approximately 500 million people have products of micro insurance against 78 million in 2008. LIC contributed a significant component of the business procured in this portfolio by garnering ₹ 99.49 crores of individual new business premium under 43.40 lakh policies and ₹ 21045.76 lakh of premium covering 1.32 crore lives.

**Status of Financial Inclusion in India**

**Trend Analysis of Financial Inclusion indicators of scheduled commercial banks for the period 2005-13**

- **Branch Penetration**

  ➢ The study brought out that for Branch Penetration when compounded annually, growth of 7.37 percent for semi urban area was reported which is higher than the compound growth calculated for rural area (2.12 percent). As revealed by the analysis, for urban area compound annual growth of 6.70 percent was shown by the analysis from 2005-13 for urban area. As far as metro area has been concerned, compound annual growth of 8.38 percent has been observed by the analysis from 2005-13. In totality, metropolitan area has shown highest growth for branch penetration (8.38 percent) as compared to rural, semi urban and urban area during the study period.

  ➢ In nutshell, branches of scheduled commercial banks have increased to almost 1.5 folds during 2005 to 2013.

- **Deposit Penetration**

  ➢ In 2013, the growth in deposit penetration was reported at 16.71 percent as per the analysis. Overall, the compound annual growth from 2005 to 2013 was reported at 15.46 percent. The CAGR in deposits for semi urban area from 2005-13 was reported at 16.22 percent which was higher as compared to rural area. In case of urban area in 2006, deposits declined by 49.59 percent and compound annual growth rate of 18.92 percent was observed for the year 2013. However, the compound annual growth of 20.61 percent was observed in metropolitan area for deposit penetration.
The results show that the pace of Deposit Penetration in urban area has been found to be slow as compared to rural and semi urban areas.

**Credit Penetration**

As per the results, credit penetration in case of rural area has shown a positive growth throughout the years (2005-13). CAGR of 19.94 percent was observed in credits for rural area which was high as compared to semi urban area (19.80 percent). Overall compound annual growth at 21.54 percent was reported in urban area for credit penetration during the study period. The growth rate when compounded annually was high in metropolitan i.e. 22.02 percent as compared to the other three areas.

As depicted in the analysis, the increase was high in rural area as compared to Semi-urban area from 2005-13. In spite of it, from the analysis it was revealed that the pace with which credit penetration increased, was high during the initial years of Financial Inclusion as a policy issue (2005) when compared with the later years of the study period.

In nutshell, credit penetration has improved during the study period in India. Trend analysis has shown that credits were increased around two times in India, during the eight years of study period.

**Trend analysis of Financial Inclusion Indicators**

As shown by the results, branch penetration in India has shown CAGR of 5.6 percent during 2005-13, whereas, highest CAGR has been observed for deposit penetration in India at 22.8 percent during the study period. However, in case of credit penetration, when compounded annually, growth of 9.2 percent was observed from 2005 to 2013, implying thereby that the status of Financial Inclusion in India has improved during the study period on the basis of all the three parameters viz. branch penetration, deposit penetration and credit penetration.

ANOVA has indicated a significant difference in branch penetration, deposit penetration and credit penetration from 2005-13 between the rural, semi urban, urban and metropolitan areas.
Index of Financial Inclusion for the period 2005-13

- The IFI has shown an upward movement throughout the eight years of study period (2005-13). However the highest value of IFI was estimated for the year 2007-08 (0.137), while in the proceeding year (2008-09) the value for IFI dropped to a level of almost 80 percent. However, in 2009-10 the index rose to almost 54 percent and furthermore an increase of 40 percent was estimated in IFI for the year 2010-11.

- In nutshell, though the IFI has shown a positive growth throughout the study period, the values of IFI for all the years remained below one indeed slight above than zero, implying thereby that there are still miles to go to achieve the objective of complete Financial Inclusion in India.

Intensity of Financial Inclusion

The All India average inclusion intensity was computed to around 0.585. The regions such as Nagaland, Andaman & Nicobar Islands, Meghalya, Chattisgarh, Himachal Pradesh, Tripura, Pondicherry, Madhya Pradesh, Orissa, Jammu and Kashmir, Manipur, Mizoram, Arunachal Pradesh, Sikkim, Assam, Jharkhand and Bihar yielded low inclusion intensity compared to all India average inclusion intensity of 0.585. Whereas, states like Punjab, Delhi, Kerala, Uttar Pradesh, Tamil Nadu and Goa recorded perfect inclusion intensity of unity. However, states such as Gujarat, Karnataka, Rajasthan, West Bengal, Maharashtra, Chandigarh, Andhra Pradesh and Haryana have reported inclusion intensity of 0.851, 0.907, 0.606, 0.802, 0.892, 0.943, 0.949, 0.588 respectively, which is above the all India inclusion intensity (0.585) but lower than unity. The findings point to the inference of high usage of banking services in the emerging regions.

Productivity analysis of Financial Inclusion drive

Productivity analysis of scheduled commercial banks

- Deposit Per Branch ratio

- On an average, during last nine years, the DPB ratio has shown an upward trend in case of all the three areas viz. rural, semi urban and metropolitan, except urban area where it has registered a declining trend since 2006-07. The DPB
ratio has increased from 6.66 crores in 2005-06 to 15.90 crores in 2012-13 in case of urban area and thus shown increment of almost double figure during the eight years.

- Similar observable fact of this ratio has been registered in case of semi urban area, but the ratio grew from 19.24 crores to 32.89 crores for semi urban areas during the eight years of study period. However, DPB for urban area was high as compared to rural and semi urban area. For metropolitan area, the DPB has shown just about double growth from 2005-06 to 2012-13 i.e. 92.55 crores to 199.27 crores. Overall, the DPB ratio varies significantly across the four areas under the study.

- **Credit per branch ratio**

  - On an average an upward trend in CPB ratio in all the four areas under the study viz. rural, semi urban, urban and metropolitan from 2005-13 has been observed. The CPB ratio was found to be highest (129.83 crores) in case of metropolitan area, followed with a wide difference, urban area (28.83 crores), semi urban area (13.37 crores) and rural area (6.49 crores). The results, as per this ratio shows that rural areas are still least productive as compared to the other three areas under the study.

  - ANOVA results across the four areas namely; rural, semi urban, urban and metropolitan, regarding CPB ratio indicate that the F value (70.278) is found to be significant at 1 percent level (p value 0.000 < 0.01), drawing the inference that the ratio varies significantly between the four areas of the study.

- **Business per branch ratio**

  - The BPB was also found the highest in case of metropolitan area (381.23 crores in 2012-13 from 170.58 crores in 2005-06) followed with a wide difference urban area (109.78 crores from 49.19 crores during the eight years), again with wide difference, semi urban area (50.60 crores in 2012-13 from 17.72 crores in 2005-06) and rural area (26.35 crores in 2012-13 from 9.98 crores in 2005-06).

  - The results of F test also supports that BPB ratio varies significantly across the four areas viz. rural, semi urban, urban and metropolitan, under the study as the p value 0.000 < 0.01 and F value is 65.755
Productivity analysis of Financial Inclusion drive

• Year wise productivity of Financial Inclusion drive

- The average inclusion growth for all the states was estimated at 1.089 (8.9 percent). According to MI only three states out of total 31 states were there that have not shown growth in Financial Inclusion during the study period while all other states have shown the index value greater than unity (MI > 1) implying thereby that Financial Inclusion has grown between the periods of study (2005-13).

- When results were evaluated for the periods 2007-08, 2008-09, 2009-10 and 2011-12, remarkable growth with regards to Financial Inclusion have been observed at 11 percent, 15 percent, 19 percent and 14 percent respectively. Although, in 2005-06 there has been evidence of decline in Financial Inclusion as the observed value was less than unity (0.917<1), thus showing no progression in Financial Inclusion during the initial phase of Financial Inclusion drive.

- To be precise, it has been observed that year 2009-10 has shown highest Financial Inclusion growth of 19 percent than rest of the years. However, in totality, there has been observed progression in Financial Inclusion during all the years of study period except 2005-06.

• State wise productivity of Financial Inclusion drive

- As revealed by the analysis, MI value was less than unity for states; Punjab (0.816), Gujarat (0.810) and Tamil Nadu (0.843), implying thereby that these states have not shown any progress with regards to Financial Inclusion from 2005 to 2013. However, states like Goa, Kerala, Delhi, Chandigarh, Pondicherry, Himachal Pradesh and Haryana have shown positive but less than all India average Inclusion growth.

- In nutshell, 21 states out of the total 31 states have shown higher Financial Inclusion growth when compared with all India average inclusion growth of 1.089.
Awareness level of rural and urban masses of lower income group regarding Financial Inclusion

- **General Awareness**
  - It has been derived from the results that majority of the respondents (44.8 percent) were single account holders. In addition (52.3 percent) respondents of urban area reported opening of two accounts however, to majority of the respondents (56 percent), bank officials helped in opening the accounts there were only 23.6 percent respondents who have accounts with cheque book out of which 36 percent were from urban area and 11.2 percent were from rural area. Whilst, significant difference between the rural and urban respondents in terms of availing the cheque book facility have been depicted by the analysis.

  - The respondents of rural and urban respondents highly preferred (46.8 percent) debit cards, but for urban respondents the figure has been reported higher at 72 percent and for rural area it was lower at 21.6 percent. However, credit cards were least preferred as compared to the debit cards. Only 43.2 percent respondents in total not at all preferred credit cards out of which 75.2 percent respondents were from rural area and 11.2 percent were from urban area. Furthermore, in totality only 4.2 percent respondents were aware about the MFIs and were availing the facilities provided by them.

  - As far as the frequency of account usage has been concerned, 1.3 percent rural respondents reported that they were not at all using their accounts once after opening it.

  - 74.4 percent respondents knew that the facility of zero balance accounts have been provided by banks. Whereas, the awareness level was more in urban respondents (78.4 percent) as compared to rural respondents (70.4 percent). However, the most preferable source of information about opening of zero balance account was bank officials (61 percent) followed by newspaper/advertisement (15 percent).

  - As per the results, 65.2 percent urban respondents reported that there was no financial advice/credit counseling center in their area followed by 66.8 percent respondents of rural place reporting the same.
As revealed by the results, 52.2 percent respondents were very interested in saving small amounts of money out of which 53.6 percent were from urban area and 48.4 percent were from rural area & in case of taking a business loan 24 percent respondents were not at all interested whereas on the contrary 21.2 percent were very interested in the same.

Rural respondents were less interested in getting information about financial matters as compared to urban respondents. Though, 25.2 percent respondents when taken as a whole were not very interested to take out loan at reasonable interest however, the figure was 27.2 percent for rural respondents, which was high as compared to urban respondents i.e. 22.8 percent (not very interested).

For level of interest in advice about managing debts, 20.8 percent respondents altogether were very interested while 19.2 percent respondents were not at all interested. However, when a comparison has been made within the places, it has been found that urban respondents have greater level of interest an advice about managing the debts (24.4 percent very interested) than rural respondents (17.2 percent very interested).

Statistics revealed that only 32 percent respondents considered investment advice important, out of which 34.8 percent were urban respondents and 29.2 percent were rural respondents. Whilst, 12.8 percent urban respondents were not at all interested in investment advice whereas the figure was reported at 9.6 percent for rural respondents.

• **Savings**

As far as the awareness level regarding savings has been concerned, only 2.4 percent respondents from the rural area and 1.6 percent from the urban area and have opened their accounts for receiving NREGP. Despite the fact, overall only 2 percent respondents have reported positively and 85.2 percent respondents not at all preferred to open their account for receiving NREGP payment. Moreover, there was no significant difference in the responses of urban and rural respondents.

There was no significant difference between the respondents of rural and urban respondents about opening of bank accounts to receive Government payments
from schemes other than NREGP. Majority of the respondents not at all preferred to open their bank accounts i.e. 46 percent whereas, 22.2 percent preferred to a little extent and 20.4 percent to some extent for the same.

➢ As indicated by the results, by and large, 80 percent respondents have not at all opened their accounts for the purpose of receiving remittances. Moreover the chi square value at 4 degrees of freedom (5.190) and the corresponding p value (0.268>0.05) has shown that there was no significant difference between the preferences of rural and urban respondents.

➢ As per the analysis, most of the bank accounts were opened for saving money as 73.2 percent respondents reported this to a very large extent. Furthermore, no difference has been observed between the responses of rural and urban respondents. Furthermore, 46.8 percent respondents to a large extent reported that they have opened their accounts to request a loan. However, the preference of rural and urban respondents for opening bank accounts for the purpose of requesting a loan differed significantly

➢ As depicted from the analysis, 46.8 percent urban respondents reported the option of saving in a bank branch as very highly preferable whereas the figure was less for rural respondents in comparison to urban respondents at 44.8 percent. Moreover 38.8 percent and 45.8 percent respondents consider this option as highly preferable and very highly preferable respectively. Also the results have shown a significant difference between the rural and urban respondents

➢ For the options such as credit union, MFI and informal means of savings, 54 percent respondents not at all preferred saving option in the past 12 months. However the figure was high for rural respondents (28 percent) as compared to urban respondents (26.4 percent). Moreover, there was significant difference between the preferences of rural and urban respondents regarding credit union, MFI and informal sources.

➢ For saving in past 12 months for expenses in future as per the results, the difference was insignificant for the rural and urban respondents (chi square=5.006, degrees of freedom=4, N=500 and p>0.05 i.e. 0.287). Moreover,
it was very highly preferable by majority of the respondents (70 percent) and was highly preferable for 20 percent respondents.

- The analysis clearly indicated that for 77 percent respondents, bank accounts were very highly preferable in comparison to 2 percent, who not at all preferred bank accounts for meeting emergencies in future. Though the differences was insignificant between the rural and urban respondents.

- **Borrowings**

  - For the frequency of borrowing by the urban and rural respondents, as revealed by the table, 59 percent respondents rarely borrowed funds while 22 percent of the respondents reported that they often borrowed funds from various sources. The difference between the rural and urban respondents was not significant statistically.

  - As per the results, 22 percent respondents reported that they often borrowed money and majority of them preferred banks as source of borrowing money (77.2 percent) followed by relatives (10.6 percent) and others. However, the frequency as well as the preference of borrowing remains the same for rural and urban respondents.

  - As far as the preference of bank, MFI, Credit Union for borrowing has been concerned, 46.8 percent respondents reported it as very highly preferable to them, although there was no significant difference between the preferences of rural and urban respondents. Moreover, for preference of borrowing from factory by using installment credit, 70.8 percent respondents did not preferred this option of borrowing and 15 percent respondents have shown moderate response towards this option. Moreover the analysis has clearly shown that the preferences of urban and rural respondents did not differed significantly.

  - For the preference of borrowing from different available sources, majority of the respondents (29.4 percent) preferred borrowing from family or friends when needed however, for 22 percent respondents’ employer as a source of borrowing was highly preferable, followed by 49.4 percent respondents who preferred employer to a moderate level. Furthermore, 31 percent respondents
not at all preferred another private lender as a source of borrowing. However the preference of another private lender as a source of borrowing, significant difference has been observed between the rural and urban respondents

- It has been clearly depicted from the analysis that 52 percent of the respondents withdraw money from their accounts once or twice within a month, followed by 22 percent respondents who withdraw 3-5 times within a month, followed by others, implying thereby that, they have been using their accounts frequently once after opening it.

- As far as the reason for preference of bank account over other available sources has been concerned, as per the results, 66.4 percent of the total respondents agreed to the fact that it costs at a low rate of interest as compared to the other modes. Additionally, 21.2 percent respondents strongly agreed to the fact that they preferred bank account because it cost a low rate of interest.

- According to the analysis, 58 percent respondents agreed to the fact that they preferred bank accounts over the other available sources because the funds they needed have been arranged by banks, followed by 26.6 percent respondents who strongly agreed to the same fact. Furthermore, analysis revealed that 54.8 percent respondents preferred bank accounts because they considered it easy (agree) followed by 28 percent who strongly agreed that it is easy to get funds while having bank accounts. Moreover the chi square result revealed that the difference between the preference of rural and urban respondents was statistically insignificant.

- As per the study, 75.4 percent strongly agreed that bank accounts as a trustworthy source followed by 20.8 percent who simply agree. However for all the factors of preference of bank accounts, no significant difference has been observed between the rural and urban respondents as shown by chi square statistics.

- The reasons for choosing other sources of getting funds rather than banks, as shown by the results, 23 percent respondents preferred other sources than banks because it was convenient for them as the collector/ lender come to door to
collect the money and the same percentage (23 percent) preferred other sources as the funds can be arranged locally (to their nearby places). Also 19 percent respondents preferred other sources than banks as the collector/lender was known to them, followed by 17 percent respondents for whom the reason for preference was that there was no need of any kind of guarantee.

- **Other Financial Services**

  - For other financial services 51.2 percent of the total respondents have not taken any kind of loan from anywhere while 27.2 percent have taken loan. Also the analysis showed that 11 percent of the respondents didn’t know about the loan as they were not operating their accounts by their own.

  - Majority of the respondents i.e. 68.2 percent reported that they not at all use their mobile phones for paying the bills. The result of the analysis showed that mobile phones were not preferred by the respondents (78 percent) for sending money. Additionally, 76 percent respondents did not preferred mobile phones to receive money. The chi square result also revealed that there was no significant difference between the preferences of rural and urban respondents for the preference of mobile phones as a source of receiving money.

  - As far as the insurance has been concerned, the results has shown that 63 percent of both urban and rural respondents did not have any kind of health/medical insurance in contrary to the 33 percent respondents who had insurance.

  - The analysis revealed that out of the 33 percent respondents, who had insurance, 68 percent respondents had not purchased the insurance personally and 28 percent respondents reported that they had purchased the insurance by themselves.

  - Analysis showed that 61 percent of the total respondents were not aware about the concept of Financial Inclusion however, whilst only 39 percent respondents reported that they were aware about the concept of Financial Inclusion.
Conclusion

The aim of the research was to gain a better understanding of the concept of Financial Inclusion and the study provided an in-depth understanding of the emergence of Financial Inclusion from Financial Exclusion. The extent and quality of Financial Inclusion depends on providing provision of savings, credit facility, insurance and remittance rather than mere accessibility to banking outlets. Furthermore, the bankability of the poor holds a major prospect for banks in developing unwavering retail base and in curbing the volatility in earnings with diversified asset portfolio, for this reason as well; RBI has been giving emphasis on making the lower income group bankable. The fundamental belief is that only sound and strong institutions can prop up Financial Inclusion in a sustainable manner and, towards this end, far-sighted regulations have to be in place to attain while protecting financial stability and consumer interest. Moreover, achieving Financial Inclusion require systematic effort which leverages technology, regulatory framework and appropriate business strategies consistently. By adopting appropriate regulatory framework for innovations in policies, partnerships, processes, and products that are meant for lower income group, RBI has sought to further the cause of inclusion without falling short of the policy goal of financial stability.

In totality, it could be concluded that Financial Inclusion has penetrated in the economy of India to a large extent in terms of depth as well as breadth. The study found that the proliferation of new bank accounts and other financial services served to a great extent in increasing the Financial Inclusion in India. As far as the intensity of Financial Inclusion has been concerned, the All-India average stood at 0.585 (less than unity), implying thereby Financial Inclusion has not paved its arms fully to all the regions. Furthermore, for the productivity of Financial Inclusion drive, eight percent productivity has been observed implying thereby that there is still lot of scope for India to boost the efforts in the direction of Financial Inclusion.

As far as the level of awareness regarding Financial Inclusion between lower income group, in terms of General financial awareness, awareness regarding savings, borrowings and other financial services has been concerned, it has been concluded that there existed a difference in the awareness level of the rural and urban masses in
terms of general awareness and borrowings. The level of general awareness and borrowings is more in urban respondents as compare to rural respondents. However in case of savings and other financial services, the awareness level of rural and urban respondents remained same, as demonstrated by the study.

While the provision of financial education might help in escalating the awareness level of people about the financial products and services, this does not inexorably lead to access and usage of these services, indeed, people should make feel the need for financial products and made able to make use of them. Having a bank account has little or no meaning in terms of full Financial Inclusion, if individuals find it difficult to use the facilities provided to them. Furthermore, appropriate and reasonably priced technology accompanied by the right business model can make Financial Inclusion economically feasible for the formal financial sector and can transform it from an obligation to an opportunity.