## Measuring Financial Inclusion in West Bengal: Policy Framework for Inclusive Growth

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**Abstract:** Greater amount of evidences exist all over the world that the poor lack access to basic financial services. Therefore, financial inclusion has become a focus of attention for development professionals to alleviate poverty. In this context, Regional Rural Banks (RRBs) were seen as primarily catering to the below poverty line (BPL) population by lending them towards meeting their investment needs. In our study, we adopted logit regression and correlation analysis to understand the impact of financial inclusion on financially deprived rural and semi-urban poor (200) of West Bengal depending on two major factors firstly, dependency on bank loans and secondly, preferences for keeping savings in banks. In supply side, the study contributes an understanding towards financial literacy as one of the requisites for dependency on bank loans and in demand side; safety is the major issue in keeping savings in bank. The paper concludes with findings, conclusions and suggestive framework.

*Keywords:* Financial inclusion, financial literacy, regional rural banks, general credit card, chit funds.

### **1. INTRODUCTION**

Poverty and exclusion continue to dominate socio-economic and political discourse in India as they have done over the last six decades in the postindependence period. Various anti-poverty, employment generation and basic services programs have been in operation for decades in India. In developing economies like India, banks are playing a very critical role as mobilizers of saving and allocators of credit to production and investment. Nationalization of banks in 1969 and creation of Regional Rural Banks (RRBs) in 1975 (Kalkundrikar, 1990) were the two milestones in inculcating banking habits among the semi-urban and rural people. The Narasimham Committee conceptualized the formation of RRBs in 1975, with joint sponsorships of Central Government, concerned State Government and Sponsor Banks in 50:15:35 to address the rural problem with a great level of professionalism and to develop the rural economy by providing credit to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs. Inherently banking sector possess a tremendous potential regarding redistribution of wealth in the society but the number of people with access to the products and services offered by the banking system continues to be very limited even years after introduction of inclusive banking initiatives in the country. Elaborating the thrust of financial inclusion by the Reserve Bank of India (RBI), its Deputy Governor states that "RBI is marketing the paradigm of financial inclusion through the bank-led model" (Chakrabarty, 2011). The two planks of the

commercial banks' involvement in the larger financial inclusion project have been (i) avenues for outsourcing through different types of agent structures above; and (ii) the introduction of IT-based devices and innovations for low-cost operations and for accounting and management information system (MIS). The approach to RRB reform (of recapitalization and amalgamation) too had been seen as one which was politically pragmatic characterized by an indifference towards the financial inclusion objective of RRB operations (MCril, 2008). Microfinance institutions can certainly help in furthering access to finance. Well-capitalized and robust financial institutions are needed to take up the financial inclusion agenda. Therefore, financial inclusion has assumed great importance in this period of crisis in tackling poverty and ensuring social justice.

It was convincingly argued that poverty is not merely insufficient income, but rather the absence of wide range of capabilities, including security and ability to participate in economic and political systems (Sen, 2000). Bottom of the pyramid generally refers to the global poor who mostly live in the developing countries. These large numbers of poor are required to be provided with much needed financial assistance in order to bail them out of their conditions of poverty.

As defined by Reserve Bank of India, Financial Inclusion is the "process of ensuring access to appropriate financial products and services such as savings, short and long term credit, leasing and factoring, mortgages, insurance, pensions, local money transfers and international remittances, needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular, at an affordable cost in a fair and transparent manner by regulated, mainstream institutional players". Financial Inclusion is considered to be a core objective of many developing nations as there is a direct link between financial exclusion and poverty. There are a variety of reasons for Financial Exclusion. From the demand side, lack of awareness, low incomes or assets, social exclusion and illiteracy acts as barriers. From the supply side, distance from branch, branch timings, cumbersome documentation and procedures, unsuitable products, language and staff attitudes are common reasons for exclusion. All these result in higher transaction cost apart from procedural hassles. On the other hand, the ease of availability of informal credit sources such as local money lenders makes them popular and costlier. There are several disadvantages in the informal sector viz, taking loans does not confer any tax benefit, nor does saving ensure any clear cut interest comparable to that given by the formal sector, because they are less secure in comparison to formal savings facilities.

The requirements of independent documentary proof of identity and address can be a very important barrier in having a bank account especially for migrants and slum dwellers which results into financial exclusion. There are several consequences of financial exclusion which can be defined through two factors. First, it complicates day to day cash management, as households and micro small scale enterprises deal entirely in cash and are susceptible to irregular cash flows. Secondly, lack of financial planning and security in the absence of access to bank accounts and other savings opportunities for people in the unorganized sectors limit their options for providing for their old age. So the financial sector is one that has the most important role to play in unleashing this potential and therein comes the role of Financial Inclusion.

RBI has considered Financial Inclusion and Financial Literacy as two pillars where Financial Inclusion acts on the supply side i.e. for creating access and financial literacy acts from the demand side i.e. creating a demand for the financial products and services. Various direct and indirect benefits that are associated with financial literacy are: (1) Deeper understanding of risks and benefits of financial services such as credit. (2) Reduced cost of information-search for the unbanked. (3) Higher household savings levels. (4) Protection against unfair, discriminatory practices, such as predatory lending and (5) Reduced cost of money transfers (including the cost of government transfers to individuals).

Financial Inclusion has the ability to generate positive externalities. It leads to increase in savings, investment and thereby enhances the processes of economic growth. It also provides a platform for inculcating the habit of saving money, especially amongst the lower income category. Presence of banking services and products aims to provide a critical tool to inculcate the savings habit. It also creates avenues of formal credit to the unbanked population who are otherwise dependent on informal channels of credit like family, friends and moneylenders at very high costs.

Getting basic banking right is the first essential step towards financial inclusion. Therefore policy support and the financial reforms by the government are needed in channelizing the financial resources towards the economic upliftment of poor people in India.

Several issues and challenges in the area of financial inclusion for inclusive growth are discussed below :

- (1) A hugely expanded bank branch and cooperative network. It is clearly established that as the bank branches increases, number of bank accounts also increase significantly.
- (2) A greater focus on credit to low and disadvantaged sections of the society.
- (3) Lending targets directed at a range of 'priority sectors' mainly agriculture, industry and weaker sections of the population.
- (4) Significant government subsidies channeled through the banks and cooperatives, as well as through related government programs.

- (5) A dominant perspective that finance for rural and poor people was a social obligation and not a potential business opportunity.
- (6) In the areas of Scheduled Castes or Scheduled Tribes population, the progress of Financial Inclusion is slow which indicates that the efforts for Financial Inclusion has to be increased significantly in such areas in order to bring in social and economic equity in the society.

### 1.1. RBI Initiatives for Financial Inclusion

RBI has taken various initiatives for financial inclusion in India:

- (1) Opening of no-frills accounts: Basic banking no-frills account is with nil or very low minimum balance as well as charges that make such accounts accessible to vast sections of the population.
- (2) Relaxation on know-your-customer (KYC) norms: KYC requirements for opening bank accounts were relaxed for small accounts in August 2005. The banks were also permitted to take any evidence as to the identity and address of the customer to their satisfaction.
- (3) Engaging business correspondents (BCs): In January 2006, RBI permitted banks to engage business correspondents (BCs) as intermediaries for providing financial and banking services, which allow banks to provide doorstep delivery of services.
- (4) Use of technology:Banks have been advised to make effective use of information and communications technology (ICT), to provide doorstep banking services through the BC model where the accounts can be operated by even illiterate customers by using biometrics, thus ensuring the security of transactions.
- (5) Adoption of Electronic Benefit Transfer (EBT): Banks have been advised to implement EBT by leveraging ICT-based banking through BCs to transfer social benefits electronically to the bank account of the beneficiary, thus reducing dependence on cash and lowering transaction costs.
- (6) Simplified branch authorization: To address the issue of uneven spread of bank branches, in December 2009, domestic scheduled commercial banks were permitted to freely open branches in tier III to tier VI centers with a population of less than 50,000 under general permission, subject to reporting.
- (7) Opening of branches in unbanked rural centers: To further step up the opening of branches in rural areas so as to improve banking penetration and financial inclusion rapidly, the need for the opening of more bricks and mortar branches, besides the use of BCs, was felt. Accordingly, banks have

been mandated to allocate at least 25% of the total number of branches to be opened during a year to unbanked rural centers.

- (8) Role of Micro Finance Institutions: The role of Micro Finance Institutions (MFIs) cannot be ignored in reaching the unbanked poor population to reduce the disparities in terms of income and savings.
- (9) Products of Financial Services: With a view to help poor and the disadvantaged section of the society banks have been introduced a General Purpose Credit Card (GCC) and Kisan Credit Card (KCC) facility.

Eradication of poverty through inclusive growth has become the mainstay of development policy pedagogy in India over the past decades. Despite the phenomenal spread of branches of regional rural banks all over the country, financial inclusion remains a distant dream. Poor households still lack access to dependable savings, credit and insurance products. High transaction costs of formal financial services are the greatest challenge that development practitioners face in reaching out to the poor. And yet, the focus on costs often ignores other important factors that play into the uneven distribution of poverty and financial exclusion across different populations within the country. If we analyze poverty from a "capability" perspective then it is pertinent to note that the nature of poverty and severity of deprivations vary between semi-urban, rural and urban India. For example, poor households in semi-urban and rural India face greater uncertainty in terms of their livelihoods and lack of access to infrastructures such as roads, railways, health facilities, education, and safe drinking water, not to mention financial services and non-farm employment opportunities. The urban poor also suffer from such deprivations but at a lesser degree. Semi-urban and rural poor households mainly borrow for agricultural purposes, animal husbandry and for other related activities (Kumar and Mukhopadhyay, 2013).

Against this backdrop, this paper makes an attempt to highlight the impact of financial inclusion on the economically and financially distressed section of the rural people referred as "target group" of West Bengal as the supply side. Simultaneously, the study focuses on the preferences of semi-urban and rural people in keeping savings in RRBs or in chit funds as the demand side. The research is conducted on 200 respondents from four districts of West Bengal. The findings of the study will be helpful in evaluating the role of financial inclusion and its effect on the target group. Moreover, the findings are expected to be helpful for government in setting rules that regulates the environment for financial inclusion and balancing the drive to bring financial services to poor households, with measures to protect consumers, as well as the stability and integrity of the financial system.

The remainder of the paper is organized as follows. Section 2 describes the review of existing literature. Section 3 explains the objectives, data and methodology. Section 4 presents data analysis and empirical findings and finally Section 5 concludes the paper with necessary suggestions.

### **2. LITERATURE REVIEW**

The basic premise for the proliferation of Regional Rural Banks in West Bengal has been to provide credit to poor households without requiring collateral. However, the roots of RRBs can be traced back in West Bengal, Harvana, Rajasthan, Moradabad and Uttar Pradesh in the year 1975 where five regional rural banks were established to inculcate savings habit among rural people. Given these practices, one pertinent question emerges: what do poor households save for? A very straightforward reason for savings is found in the theory of Life Cycle Hypothesis (LCH) propounded by Ando and Modigliani (1963). According to LCH. an individual saves during working life to smooth consumption post retirement. However LCH has very limited applicability in the context of developing nations with multigenerational households (Deaton 1997). The Narasimham Committee (RBI, 1998) emphasized that while discharging the functions of RRBs as purveyors of rural credit and mobilizers of rural savings, RRBs should not ignore the importance of financial viability and operational efficiency. The productivity, profitability and solvency of the RRBs must be maintained and sustained to enable them to function as an effective and efficient institution of rural credit. In general, poor households tend to save for many reasons, viz, to meet working capital needs of a small business, to pay children's school fees, household consumption, religious ceremonies, to purchase a piece of land, to renovate a house and so on. Such savings can be broadly classified into two forms: "low frequency" savings and "high frequency" savings (de Aghion and Morduch, 2005).

"Low frequency" savings theory tries to explain how the poor households make small but planned savings periodically over a long period of time to finance hefty expenditures in the future. "High frequency" savings refers to poor households' conscious effort to save for mitigating effect of shocks arising from income uncertainty in the future. "High frequency" savings thus can be considered as a natural extension of permanent-income hypothesis propounded by Friedman (1957) which postulates that rational households consume more if a rise in income is permanent, but the same household saves whatever it can out of transitory income increases.

It is well established that the poor households' ability to save is seriously crippled by lack of available savings instruments which are safe and dependable (Rutherford, 2000). Needless to say, the poor are very much in need of savings and they often are actively seeking savings and credits venues. But what are the necessary features of savings and credit services geared towards the poor? According to Wright (1999), some of the key issues in offering savings products to poor households include the following: 1) balancing between convenience

and returns, 2) balancing terms and needs, and 3) compulsory locked-in savings requirement. Poor households prefer savings products that offer easy accessibility, security, liquidity and assured returns.

In order to offer savings products to the poor in a sustainable way, it is essential to offer such products in collaboration with registered financial institutions like commercial banks, regional rural banks and credit cooperatives. According to Cracknell (2005), the first and foremost step in this regard is identification of the right bank and branches and then optimizing use of bank branches to offer savings products at a "low unit cost" to the poor. This is possible only when banks' operations department, marketing and brand management departments work in tandem to achieve operational sustainability. According to Dev (2006), financial inclusion is required for improving the living conditions of poor farmers, rural non-farm enterprises and other vulnerable groups. Apart from formal banking institutions, which should look at inclusion both as a business opportunity and social responsibility, the role of the self-help group movement and microfinance institutions is important to improve financial inclusion. Gopinath (2006) focuses on financial education which is an important factor for the excluded groups to improve their understanding of financial products, concepts and risks and, through information, instruction or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being. Financial education can help them prepare ahead of time for life cycle needs and deal with unexpected emergencies without assuming unnecessary debt.

Banks and other agencies strive to extend financial education to the masses to appreciate that financial inclusion is a continuous process.

Kumar (2009) attempts to understand the behavior and determinants of financial inclusion in India. The income level of the semi-urban and rural people, the employment base of the semi-urban and rural people, the influence of average people per branch on deposit and credit penetration are determining the level of financial inclusion in India. He even highlights that, although the deposits accounts are increased overtime but its growth has not matched with respect to increase in population. A positive coefficient for the employee proportion indicates that, the employed people seem to be more aware, active and interested with regard to banking activities in terms of deposits and credit activities.

Chakrabarty (RBI, 2013) adopt a structured and planned approach towards financial inclusion by not just focusing on improving access to financial services but also encouraging demand for financial services through financial literacy initiatives, by giving permission to non-bank entities to partner banks in the financial inclusion initiatives, encouraging banks to leverage technology to attain greater reach and penetration and to adopt innovative business models and delivery channels.

Hameedu (2014) has shown the issues in measurement and analysis of financial inclusion by way of building up suitable indicators such as access to and usage of financial services as well as their coverage and penetration. It deals with understanding the barriers of financial inclusion and development of the indicators for assessing the same. One of the most important ways to achieve financial inclusion in a cost effective manner is through linkages with microfinance institutions and local communities. Manta (2014) explains that the deepening of the financial sector is essential for a developed and mature economy. Financial deepening is only possible when individuals and households are financially literate to make informed choices about how they should save, borrow, and invest. The nationalization of banks, Lead Bank Scheme, Regional Rural Banks, formation of SHG's has helped to expand the financial sector across the length and breadth of the country. Poor people in general are financially excluded, but women in many countries are frequently more financially excluded at similar levels of income because of biased attitude of banks, lack of collateral and startup capital, financial illiteracy and so on. Initiatives that are taken in providing benefits to women are: designing affordable loan products, reaching women customers through effective and low cost delivery channels, crafting marketing strategies through effective sales force, women entrepreneurship etc. Micro finance has definitely made a major contribution to women's access to credit opportunities.

In recent years, the contribution of commercial banks towards financial inclusion has been exceedingly well, but mainly found in urban areas. The contribution of RRBs and cooperative banks has also been significant which mainly caters to rural population and are considered to be the ultimate institutions for providing financial access to semi-urban and rural households.

## **3. OBJECTIVES, DATABASE AND METHODOLOGY**

The study has two broad objectives and for each objective I have taken two different samples of size 100 each:

- (a) To find out the impact of financial inclusion among the under privileged rural people.
- (b) To identify the factors behind preferences of banks or chit funds as depositories of savings.

## Data and Methodology

A large segment of the population in West Bengal (about 25%) earns less than Rs. 200 per day. They live in the urban, semi-urban and rural areas.

Their unique characteristics and needs shape their daily lives. We have made a questionnaire survey in a comprehensive manner covering West Midnapore, Howrah, Bardhaman and South 24 Parganas starting from February 2015 to December 2015. The source of primary data is farmer's club of each of the four areas selected for data collection. A comprehensive list of rural people together with their personal details was received from farmer's club. From that, a list of 200 rural people has been selected randomly on the basis of their financial needs. We have divided the entire sample into two different sets.

For the first objective, the first set comprises of 100 rural people on whom the impact of financial inclusion have been analyzed on the basis of different variables such as: opening of basic bank savings a/c, distance covered in visiting bank branches, holding of kisan credit card and general credit card, literacy level of rural people, number of family members, number of earning members in the family and types of occupation by conducting logit regression analysis.

For the second objective, another sample size of 100 collected from semiurban and rural areas to analyses the preferences for keeping savings in RRBs or in chit funds. This study has been conducted by using Pearson's Correlation Coefficient and Spearman's Rank Correlation Co-efficient.

District	Number of respondents from each area
West Midnapore	43
Howrah	27
South 24 Parganas	15
Bardhaman	15

### Table 1: Break-up of area-wise first 100 sample size

#### 4. DATA ANALYSIS AND EMPIRICAL FINDINGS

#### 4.1 Logit Regression

This is an attempt to comprehend the significant role played by RRBs on inclusive growth in West Bengal where a large population is deprived of the financial services which are very much essential for overall economic growth of the state. Loans from branches of RRBs referred as "Dependency on bank loans" is taken as the dependent variable. We have tried to highlight the factors significant enough to explain the dependent variable. In order to analyze the dependency on bank loan of rural customers, different variables are analyzed such as the literacy level, occupation level, number of family members, distance covered in visiting bank branches, opening of basic bank savings account, holding of Kisan credit card and General credit card. We have classified the collected set of respondents into two groups, one group is depending on the bank loan and another group is not depending on bank loan. In this model, the dependent variable Y is defined as 1 for those who are taking bank loans and 0 for those who are not taking bank loans. We consider Pn as the probability of the n number of individuals being classified as dependent on bank loans and (1- Pn) as the probability of n number of individuals being classified as not dependent on bank loans. A logit model is based on cumulative logistic probability distribution function (Gujarati and Sangeetha, 2007). It is specified as

Pn=F (Ln) = F( $\alpha$  +  $\beta$ Xn) = 1/1+ e-Ln ....(1) Where, Ln =  $\alpha$  + $\beta$ Xn

Pn = is the probability of n number of individuals being classified as dependent on bank loans.

1 - Pn = is the probability of n number of individuals being classified as not dependent on bank loans.

e = is base of the natural logarithm.

X = is a vector of independent variables.

 $\beta$  = is a vector of parameters to be estimated.

 $\alpha$  = is a constant term in the model.

Ln = is the logarithm of odds that the n number of individuals are depending on bank loans.

We can note from (1) that Pn/1 - Pn = 1 + e Ln/1 + e-Ln = e Ln $Ln=In (Pn/1-Pn) = \alpha + \beta Xn$  .....(2)

From equation (2) the probability Pn of targeted respondents being classified as dependent on bank loans can be computed. The logit regression equation was estimated by using various combinations of the independent variables discussed above.

$$\label{eq:Ln} \begin{split} Ln &= In \ (Pn/1 - Pn) = 19.049 - 20.473 EAR + 1.603 GCC + 0.725 KCC - .074 BAS \\ + .312 DIS + .205 FAM + .043 OCC + .294 LIT \end{split}$$

Where, EAR = Number of Earning Members. GCC = Holding of General Credit Card. KCC = Holding of Kisan Credit Card. BAS = Opening of Basic Savings Bank Account.

DIS = Distance covered in reaching bank branches.

FAM = Number of Family Members.

OCC = Types of occupation.

LIT = Literacy level of Rural People.

Table 2: Variables showing the extent of Financial Inclusion

Variables	Coefficient	P-value
Literacy	.294	.045**
Occupation	.043	.893
Family Members	.205	.719
Distance	.312	.667
Opening of Basic Savings Account	074	.943
Holding of Kisan Credit Card	.725	.247
Holding of General Credit Card	1.603	.020**
Number of Earning Members	-20.473	.999

#### Implies p < .05

In the above logit regression, Literacy and Holding of General Credit Card are found to be significant at 5 percent level, whereas all other slope coefficients are found to be insignificant. It can be viewed from the above regression analysis that independent variables such as literacy level and holding of general credit card are the two main determinants of dependency on bank loans. . It is necessary to educate the whole family, rather than focusing on individuals. One of the ways of overcoming the challenge of low literacy skills is through the use of the spoken words, practical exercises and tools. The cost and difficulty of translating materials into local languages may also need addressing, and the sharing of resources is valuable in this regard. Holding of General Credit Card specifies those people who are taking entrepreneurial credit in the non-farm sector with no ceiling limit and without any insistence of security, purpose or end use of the credit, which may not be necessarily in the form of a card, are usually depending on bank loans. General Credit Card can be issued in the form of a pass book. The result also shows that, those who are holding Kisan credit card or have opened a savings account are not at all accessing their accounts. In the situation of necessity they prefer taking loans from informal sources or friends or relatives instead of going to banks. Moreover, Kisan credit card is also not much in use for cash credit facilities. Distance in visiting bank branches played a negative role in financial inclusion.

Most of the rural people are farmers with a very minimum literacy level, it is hardly expected that they will access savings account which entails paperwork. Number of family members is mostly more than five and earning members are usually less than three which makes it difficult for the rural people to bear the burden of increased cost of living. Loans can be taken from banks subjected to a certain limit unlike loans from informal sources.

The coefficient of number of earning members and opening of basic bank savings account are negative whereas the coefficients of remaining variables are positive. The results indicate that if the literacy level of rural people goes up by one unit, the log of odd ratios in favor of an individual who is a dependent on bank loan increases by .294 units. Similarly, if the holder of General Credit Card goes up by one unit, the log of odd ratios in favor of an individual depending on bank loan increases by 1.603 units. If we take the exponent of the slope coefficient corresponding to literacy level of rural people, we get 1.341 and for the holders of General Credit Card it is 4.969. This shows for a unit increase in literacy level and holders of General Credit Card, odds in favor of an individual depending on bank loan increases by a factor of 1.341 and 4.969. From Table 1, it can be concluded that financial inclusion has not been taken place in the manner as decided by The Government of India. The classificatory ability of the logit regression model is explained below.

The count R2 for the logit regression is 70 per cent. The cut off probability for classification is kept at 0.5, suggesting that targeted respondents having a probability greater than 0.5 would be classified as a dependent on bank loans and below 0.5 would be classified as not dependent on bank loans. The classificatory ability of the logit regression model is explained in Table 3.

	Predicted Depende	Total	
Actual Dependency on Bank Loan	Not dependent on Bank Loan	Dependent on Bank Loan	
Not dependent on Bank Loan	16	18	34
Dependent on Bank Loan	12	54	66

Table 3: Classification of Results based on Logit Regression using Sample Data

Table 4 indicate that 47.1 percent of the targeted respondents not dependent on bank loans are classified correctly whereas 81.8 percent of targeted respondents dependent on bank loans are classified correctly.

# 4.2 Correlation Analysis

The concept of Chit Fund started decades ago when a group of needy people found that getting a bank loan was too complicated, had unsure and indefinite cash flow, but had to meet big expenses. People liked the idea of saving through chits and availing dividend every month. Not only this, chits had other advantages like easy joining, minimum documentation during bid etc. Moreover market fluctuations didn't affect chits. Chits instilled the habit of compulsory saving for all categories of people specially the middle class and the poor. Based on mutual trust, a mode of savings and a source of credit, chit funds evolved over the years only to become an enormous success in the market, but there is an occasional tale of deceit and swindle here and there. One of the major financial scam is "Saradha group financial scandal" which held in 2013 in West Bengal."Saradha Shock" caused a decrease in social mobility as most of the Saradha Group depositors came from lower income strata. Three years after that incident, rural people still possess the tendency of investing in chit funds. In this part of the analysis, i have tried to focus on the extent of financial inclusion in semi-urban and rural areas in terms of their preferences for keeping savings in RRBs and in chit funds. Since, prevalence of chit funds is observed not only in rural but also in semi-urban areas, therefore, I have taken a sample of 100 respondents from rural as well as semi-urban area. Out of which, I have made two sub-samples of 54 and 46. 54 people prefer to keep savings in chit funds and 46 in RRBs. Accordingly; I have conducted correlation analysis to highlight the factors that prompts the respondents to keep savings in chit funds or in RRBs.

District	Number of respondents	Number of respondents from each area		
	Semi-urban	Rural		
West Midnapore	18	22		
Howrah	13	12		
South 24 Parganas	8	12		
Bardhaman	8	7		

Table 4: Break-up of area-wise second 100 sample size

# Pearson's Correlation Co-efficient can be defined as:

The square of the coefficient of multiple correlations (R2) can be computed using the vector c = (rx1y, rx2y....rxNy)T between the predictor variables (X1, X2, X3....Xn which are independent variables) and the target variable y (dependent variable) and the correlation matrix Rxx symbolizes inter correlations between predictor variables. It is given by

 $\mathbf{R}^2 = \mathbf{c}^{\mathrm{T}} \mathbf{R}_{\mathbf{x}\mathbf{x}}^{-1} \mathbf{c}$ 

Where, cT is the transpose of c and R<sup>xx</sup>-1 is the inverse of the matrix shown below:

$$Rxx = \begin{bmatrix} r^{x}1^{x}1 & r^{x}1^{x}2....r^{x}1^{x}n \end{bmatrix}$$
$$r^{x}2^{x}1$$
$$\begin{bmatrix} r^{x}n^{x}1 & r^{x}N^{x}N \end{bmatrix}$$

# Spearman's rank correlation co-efficient is specified as:

For a sample of size n, the n raw scoresXi, Yiare converted to ranksrgXiandrgYi andRsis computed from:

Rs = prgx, rgy= cov (rgx, rgy) Standard deviation of rgx and rgy

Where, p denotes Pearson's correlation coefficient but applied to the rank variables.

Cov (rgx, rgy) is the co-variance of the rank variables.

Only if all n ranks are distinct integers, it can be computed using the popular formula specified below:

$$R = 1-6\sum di2$$

n (n2 – 1)

Where, di = the difference between the two ranks of each observation;

n = the number of observations.

Table 5 shows the factors that induces semi-urban and rural people in keeping savings in RRBs

	Co-efficient	R	Co-efficient	R
Less Paperwork	.242	.105	.239	.110
Easy Withdrawal	061	.689	060	.691
Interest Rate	245	.101	.246	.099†
Safety	.405	.005**	.403	.006**
Getting Help	.417	.004**	.429	.003**
Here, r denotes Pearson's correlation coefficients. R represents Spearman's rank correlation coefficients. Here, ** $p < .01$ † $p < .10$				

Table 5: Preferences for keeping savings in RRBs

From Table 5, it is evident that Pearson's correlation coefficient is negative in two out of five variables and the coefficients are found to be insignificant. For other three variables such as: Less paperwork, Safety and Getting help from bank personnel, coefficients are positive but it is significant only for two variables such as: Safety and Getting help from bank personnel at 1% level of significance. Table 3 also exhibits that, Spearman's rank correlation coefficient is negative in one out of five variables viz, Easy withdrawal and at the same time it is found to be highly insignificant. Out of remaining four variables, three are exhibiting significant result at 1% and 10% level of significance.

Results of Table 5 simply indicate that, semi-urban and rural people who are very safe players dislike taking risk and liking to keep their savings in bank. Nowa-days, training facilities are provided to the banking personnel to keep them up to date according to the changing needs and behavioural pattern of bank customers. To keep pace with such rapid changes in banking norms and regulations, RRBs banking personnel now giving special attention to underprivileged sections of the society mainly those rural people who lives in the remotest part of rural areas by rendering help in fulfilling all banking formalities specially opening of basic bank savings account, is the main reason that the variable "Getting help from banking personnel" exhibits significant result. "Interest rate" is also significant at 10% level, which guarantees a safer investment wherein a depositor invests a fixed sum every month with bank. The sum accumulates, gathering higher interest in comparison to chit funds.

Table 6 highlights the factors which induces semi-urban and rural people in keeping savings in chit funds

	Co-efficient	r	Co-efficient	R
Easy Access	.019	.890	.036	.795
High Return	.633	.000***	.584	.000***
Less Paperwork	132	.342	129	.354
Hassle Free	111	.424	040	.772
Distribution Network	190	.170	091	.512
Here, r denotes Pearson's correlation coefficients. R represents Spearman's rank correlation coefficients. Here, ** p < .01				

Table 6: Preferences for keeping savings in chit funds

From Table 6, it is evident that Pearson's correlation coefficient and Spearman's rank correlation coefficient is negative in three out of five variables such as: Less paperwork, Hassle free services and Distribution network and their coefficients are highly insignificant. The variable "High Return" only exhibits significant result at 1% level.

Results of Table 6, indicates that, semi-urban and rural people are highly interested in investing in chit funds only for higher amount of return. The assurance of higher return than banks that the rural people are getting from chit funds inducing them to invest their savings even after getting cheated several times and the main reason for such behavior is high amount of illiteracy. The response that has been collected during the survey clearly portrays that, those who are investing in chit funds; only 5%-10% of them are getting return. Another factor that shapes the lives of both the urban, semi-urban and rural poor is internal migration. The semi-urban and rural poor migrate to nearby urban towns and cities in search of better livelihoods. Lack of employment opportunities in rural India together with low pay compel the rural population to migrate to cities. Since the semi-urban and rural poor cannot afford to pay for a decent housing, they end up staying in slums which lack basic infrastructure. Urban migrants can be further classified into two sub-groups: "permanent migrants," a group of migrants from semi-urban and rural areas that migrate to cities permanently; and "temporary migrants," individuals that commute from semi-urban and rural to urban centers seasonally or at regular intervals (Ruthven, 2001). Migrant workers in general, but permanent migrants especially, cannot access basic banking services as they fail to fulfill Know Your Customer (KYC) norms stipulated by the Reserve Bank of India for not having

proof of address, even when the bank branch could be at a stone's throw distance from the migrants' squatters. Even the no-frills account system fails to reduce these migrants' woes since those accounts remain mostly dormant or inoperative (Thyagarajan and Venkatesan, 2008). This calls for heavy amount of dependence on chit funds.

Therefore, we can conclude that in spite of getting cheated by chit funds rural people are still looking for keeping their savings with them. Distribution network of chit funds and accessibility to them is another factor of preferring chit funds over. Moreover, they are having a greater access in reaching semi-urban and rural people by coming to their doorsteps where formal financial institutions are much lagging behind. Minimum amount of paperwork and hassle free services in comparison to any formal financial institutions is another driving force for keeping savings in chit funds.

## 5. CONCLUDING REMARKS AND SUGGESTIONS

The present paper investigates the role of financial inclusion and its impact on the economically and financially distressed section of the society mainly those who lives in the remotest part of rural areas.

The study shows that those who have a certain literacy level and are holding general credit card are usually depending on bank loans. A Family who are financially educated are having an improved understanding of mainstream financial services and encouragement to avoid non-standard services and hence depending on bank loans. Holders of General Credit Card are usually engaged in non-farm entrepreneurial activities and credit requirements are extended under this scheme for working capital and term loan. It is obvious that people holding GCC are depending on bank credit. Therefore, financial education and financial inclusion will go hand in hand.

There is global policy interest in increasing financial inclusion and recognition of the need for complementary policies on financial education and consumer protection. The surging global interest in financial education is reflected in national policies. Governments are now addressing the financial inclusion and financial education through coordinated strategies designed to tackle both demand and supply-side barriers to financial inclusion and low levels of financial literacy. Policy makers increasingly recognize that financial exclusion is a risk to political, social, and even financial stability, impeding economic advancement, and therefore, financial inclusion presents an opportunity to improve lives. The G20 governments have embraced the challenge, putting financial inclusion on their development agenda in 2009 and launching the "Global Platform for Financial Inclusion".

The study also finds that, semi-urban and rural people who are keeping savings in banks are usually focusing on high amount of safety and greater degree of support and help from bank personnel in meeting up bank formalities. Preferences for chit funds are mainly due to high return and volatility factor.

With regard to our findings, measures and products designed to reach the unbanked and the poor have been advocated and consciously implemented for decades. However, in recent years, the starting point of the understanding of term 'financial inclusion' and the related products is largely a matter related to banks' initiatives, rather than the concern of a wider range of players in microfinance covering Primary Agriculture Co-operative Societies (PACS), Micro-finance Institutions (MFIs) and Self-help Groups (SHGs), etc. Government of India has been supported by National Bank for Agriculture and Rural Development (NABARD) through the Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF). The major initiatives of FIF are: (i) to support cooperative banks and RRBs for setting up financial literacy centers; (ii) assistance to RRBs for demonstrating banking technology; (iii) support for migration of data of PACS to Core Banking Solution (CBS) of cooperative banks; and (iv) financial education and literacy programs in schools and through common service centers. The major initiatives under FITFhave been: (i) ICT solutions for RRBs adopting Business Correspondent (BC) model; (ii) Support for CBS of weak RRBs; (iii) Assistance for RRBs for RuPay KCC and RuPay Debit Card and for purchase of additional Point of Sale (PoS) devices; and (iv)Support to RRBs and cooperative banks for ATM inter-change charges.

The Swabhimaan programme launched by the Ministry of Finance, Government of India in 2011, aimed to bring banking within the reach of the masses through brick and mortar branches or through various forms of ICT-based models including BCs. The experience of the FIFs to increase outreach to an increasing large number of villages and unserved areas have fed into the Pradhan Mantri Jan-Dhan Yojana (PMJDY) launched in 2014. Apart from the accounts opened under PMJDY and savings deposited by RRBs, they have accounted for a large number of initiatives in terms of products offered and infrastructure support provided towards financial inclusion. The range of such products is large and varies from RRB to RRB which includes various types of deposit accounts and credit or debit smart cards, insurance products, financial literacy initiatives, Direct or Electronic Benefit Transfers (DBT and EBTs), pensions and various types of loan initiatives such as housing, education etc. These products have been deployed through various types of outlets, which include brick and mortar branches, Customer Service Point (CSP) outlets, kiosk banking, ultra-small branches (USBs), with the help of ATMs and tablet-based micro ATMs and Point of Sale (PoS) devices.

As per NABARD sources, in terms of Financial Inclusion, RRBs are playing a major role. All RRBs have migrated to the Core Banking Solution platform, for which NABARD by supporting 28 loss-making banks all over India has played a pivotal role. Also they have, at par with other banks, taken up Realtime gross settlement (RTGS) and have been supported for deploying ATMs for banking and financial services in remote areas of West Bengal. All RRBs have signed a MoU for implementing Jan Suraksha Yojana and Jeevan Jyoti Yojana. They have issued smart cards of various types and generally have been at the forefront of the financial inclusion measures.

The Nachiket MOR committee (2013) opined that, it would be important to have the regulatory flexibility to approach payments, savings, and credit independently (the Vertically Differentiated Banking Design) and to bring them together when the efficiency gains are high and the other costs are low. Differentiated banks are distinct from universal banks as they function in a niche segment. The differentiation could be on account of capital requirement, scope of activities or area of operations. In fact the Urban Co-operative Banks (UCBs), the PACS, the RRBs and Local Area Banks (LABs) could be considered to be differentiated banks as they operate in localized areas. To tap the unmet demand for financial services, it is felt that it is worth experimenting with new types of institutions for financial inclusion. Such a proposal for the differentiated banks effectively serves to "kick them upstairs" through merger into an entity at the state or even zonal level.

More research and evaluation is necessary to further explore the role of financial inclusion and its impact on the target group viz, financially deprived section of the society. Leaders from 50-plus developing and emerging market countries also have committed to advance financial inclusion domestically. This political tailwind, combined with continued business model innovations and an

increasingly better understanding of how poor people use financial services, has set the stage for ultimately bringing to all poor households the financial services they need to improve their lives. The impact of financial education initiatives on financial inclusion and the role of differentiated banks performing in state or zonal levels are considered to be creative solutions in reaching this target group that offers significant hope in near future.

### REFERENCES

Ando, A., & Modigliani, F. (1963) 'The "Life-Cycle" Hypothesis of Saving: Aggregate Implications and Tests', American Economic Review, 53: 55-84.

Deaton, A. (1997) 'The Analysis of Household Surveys', World Bank.

Dev, S. M. (2006) 'Financial Inclusion: Issues and Challenges', Economic and Political Weekly, 41 (41), 14-20.

Gopinath, S. (2006) 'Inclusive Growth: Role of Financial Education', RBI Bulletin, pp 1517-1521.

Hameedu, S.M. (2014) 'Financial Inclusion - Issues in Measurement and Analysis', *International Journal of Current Research and Academic Review*, 2, (2), 116-124.

Chakraborty, K.C. (2011) 'Financial Inclusion: Financial Inclusion and Banks: Issues and Perspectives', at FICCI-UNDP Seminar, New Delhi.

Chakraborty, K.C. (2013) 'Financial inclusion in India – journey so far and way forward', at the Finance Inclusion Conclave, New Delhi.

Kumar, L. and Mukhopadhyay, J.P. (2013) 'Patterns of Financial Behavioramong Rural and Urban Clients: Some Evidence from Tamil Nadu, India', working paper at Institute for Money, Technology and Financial Inclusion (IMTFI), University of California, Irvine.

Kumar, N. (2009) 'Financial Inclusion and its determinants: Evidence from state level empirical analysis in India', Reserve Bank of India, 1-23. www. emeraldinsight.com/doi/full/10.1108/17576381311317754?mobileUi=0

Manta, A. (2014) 'Financial Deepening of Products and Services for women', *The International Journal of Management*, 3, (1), 69-77.

MCril (2008) 'Will Reforms Enable Outreach? M-CRIL Review of Rural Banking in India', working paper 1, Micro-Credit Ratings International Limited.

RBI (1998). Report on Banking Sector Reforms (M. Narasimham Committee, 1998), Mumbai.

RBI (2011), Report on Financial Inclusion: Financial Inclusion and Banks: Issues and Perspectives (Swabhimaan Programme), New Delhi.

RBI (2013). Report onComprehensive Financial Services for Small Businesses and Low Income Households (Nachiket MOR Committee, 2013), Mumbai.

Ruthven, O. (2001) 'Money Mosaics: Financial Choice and Strategy in a West Delhi Squatter Settlement', Working Paper Series, Paper No 32, Finance and Development Research Program, University of Manchester, Institute for Development Policy and Management.

Thyagarajan, S., & Venkatesan. J. (2008) 'Cost-benefit and Usage Behavior Analysis of No Frills Accounts: A Study Report on Cuddalore District', College of Agricultural Banking and IFMR Centre for Micro Finance, Pune and Chennai, India.

http://www.centre-for-microfinance.org/wpcontent/uploads/attachments/ csy/1299/28\_NoFrills\_Cuddalore.pdf

#### **Books:**

B.A. de Aghion & Morduch, J. (2005): The Economics of Microfinance. Massachusetts: The MIT Press, Cambridge.

Friedman, M. (1957): A Theory of the Consumption Function. NJ: Princeton University Press, Princeton.

Gujarati, Damodar, N. and Sangeetha (2007): Basic Econometrics, Tata McGraw-Hill Publishing Company, New Delhi.

Kalkundrikar, A.B. (1990): Regional Rural banks and Economic Development. Daya Publishing house, India.

Rutherford, S. (2000): The Poor and Their Money. Oxford University Press, New Delhi.

Sen, A. (2000): Development as Freedom. Oxford University Press, New Delhi.

#### **Online Document:**

Cracknell, D.: Serving Depositors: Optimizing Branch Based Banking. Nairobi, Kenya: Microsave. http://www.microfinancegateway.org/gm/ document-1.9.29811/26209\_file\_Serving\_depositors\_Cracknell.pdf (2005).

PMJDY Brochure from www.pmjdy.gov.in 6.

PMJDY (2016) Progress Report retrieved on 15 Feb 2016 from http://www.pmjdy. gov.in.

Wright, G. A. N.: A Critical Review of Savings Services in Africa and Elsewhere. Microsave, Kenya.http://www.microfinancegateway.org/gm/document 1.9.29585/1735\_ST\_Critical\_Rvw\_Savings.pdf (1999).