# Financial inclusion in Vadodara: the role of banks

Rohtash Bhall<sup>1</sup>, Dr. Ganesh Chavan<sup>2</sup>, Rinkal Vankar<sup>3</sup> *Associate Professor, Fms-Mba, Pimr, Parul University, Vadodara, India* 

Abstract—Financial inclusion represents a modern strategy for attaining economic expansion alongside poverty reduction measures. Every member of society gets access to economical banking solutions through this policy regardless of their social status. The concept stands as a main focus because it serves to decrease disparities between various social groups. The modern economic growth and development process depends heavily on financial institutions. This research analyses financial inclusion effects on economic growth since the year 2011. The analysis based on secondary data through a multiple regression model established that the presence of bank branches together with the credit deposit ratio create positive influences on GDP while ATM expansion does not impact GDP in India.

*Index Terms*—Financial inclusion, GDP, ATM, Economic growth, Social Status

## I. INTRODUCTION

India is a large country with 1.2 billion people living in 29 states and seven union territories, spread across approximately 600,000 villages and 640 districts. However, many people especially those in rural areas do not have easy access to financial services. For instance, while around 40% of households have bank accounts, only 38% of the 117,200 branches of scheduled commercial banks operate in rural areas (Gounasegaran, Kuriakose, & Iyer, 2013). This issue of accessing affordable financial services is a global challenge, which is why many countries, including India, are focusing on financial inclusion. Financial inclusion means providing essential banking services such as savings, loans, credit, insurance, and remittances at reasonable costs to people who are often left out of the formal financial system (Chhabra, 2015; Singh et al., 2014). By improving access to these services, the living standards of poor and disadvantaged groups can be significantly enhanced. Round-the-world economic access to affordable banking solutions includes India among other countries. The global push for financial inclusion describes the effort to provide banking services to society's poorest sectors of the population because this has emerged as a worldwide priority for India and numerous nations across the globe. The availability of banking services and credit and insurance and financial instruments to people creates substantial improvements in their financial state and enhances their total life quality.

Through ongoing encouragement, the Reserve Bank of India (RBI) promotes banks to extend their services by creating new branches and establishing more automated teller machines across underbanked regions. Financial inclusion delivers essential financial services such as savings accounts along with loans insurance and pension schemes to low-income families together with other disadvantaged groups from society. Such financial services deliver security alongside stability so people can achieve better opportunities for their upcoming future.

The Indian government treats financial inclusion as a matter of genuine national importance. Financial Stability and Development Council (FSDC) operates under its specific purpose to promote financial inclusion and literacy throughout India. Through its established framework the RBI implemented the Financial Inclusion Advisory Committee (FIAC) to facilitate the expansion of financial services for every Indian. The coordinated efforts by banks with policymakers and financial institutions aim to close the gap so all Indians living anywhere can access important financial services.

## Definition

Financial inclusion provides every community member and particularly vulnerable and low-income groups with necessary financial services along with timely and sufficient funding at reasonable credit rates. Rangarajan (2008) defined this concept as creating financial opportunities for people excluded from traditional banking operations. The April 2012 World Bank study showed that 9% of Indian individuals obtained new loans during the previous year while

35% of the population had formal bank accounts but this rate fell short of other developing economies at 41%. Chakrabarty (2013) describes financial inclusion as the proper delivery of fair and transparent financial products and services for all societal groups. The main objective aims to extend financial service access to disadvantaged groups so they can share in economic development benefits. Several government measures exist to facilitate the access of neglected and poor populations to these services.

### Factors Affecting Access to Financial Services

Financial inclusion requires the delivery of bank accounts alongside savings accounts and loans as well as insurance products to succeed. The availability of banking insurance and capital market services combined with timely credit represents necessary conditions for financial inclusion to benefit every social group. The development of low-income families depends heavily on their access to financial services because they mostly need assistance navigating financial products due to their insufficient education and information. Both households and businesses experience service and credit limitations because of inadequate access. In spite of recent progress more elements continue to restrict people's ability to obtain financial services easily.

### Place of Living

Commercial banks establish their facilities in crowded urban locations which show high profitability. Residents of rural areas experience significant challenges when trying to obtain financial service access. Physical distance together with poor transportation and low population density and high mobility rates among people without fixed addresses create barriers to access.

### Absence of Legal Identity and Gender Bias

Proper legal documentation such as birth certificates or identity cards prevents minorities and migrant populations along with refugees and women from accessing financial services. Women find it difficult to secure credit because they lack ownership of property assets and may need male sponsorship to obtain financing.

Limited Knowledge of Financial Services

Lack of basic education together with financial illiteracy serve as significant obstacles. The majority of people fail to recognize the significance behind financial instruments which include bank accounts together with cheque facilities and loans and overdraft options and insurance policies. Enhanced financial education programs will enable more users to make proper usage of these financial services.

### Level of Income and Bank Charges

The financial service accessibility of a person directly depends on their current income level. The services intended for low-income consumers may still present difficulties to those who fall into this demographic. Indian citizens avoid bank services because of hidden fees which restricts their access to financial products.

## **Rigid Terms and Conditions**

A large number of people refrain from using financial products which impose strict rule requirements. Banks enforce specific terms which demand their customers to maintain required minimum balances while implementing other mandatory conditions. Strict terms prevent potential users from enjoying financial service benefits.

### Type of Business

A business organization structure determines how customers can access financial services. Banks choose to lend money to large organized businesses but they frequently reject loan requests from smaller unorganized businesses. These smaller enterprises experience regular loan rejections because of banking institutions.

## II. REVIEW OF LITERATURE

Many studies (Aghion & Bolton, 1997; Banerjee & Newman, 1993; Banerjee, 2001) discussed that access to finance has been seen as a critical factor in enabling people to transform their production, employment activities and to exit poverty. Researchers have been argued that the very fundamental activity of the banking sector, delivery of credit, are essential to boost any economic activity and enables the generation of capabilities (Sen, 2000). Dangi and Kumar (2013) examined the initiatives and policy measures taken by RBI and Government of India. This study also focused on current status and future prospects of financial

inclusion in India. It has been concluded that financial inclusion shows progressive and valuable changes but sufficient provisions should be incorporate in the business model to certify that the poor are not driven away from banking. Suryanarayana (2008) focused on definition of inclusion/exclusion with reference to an outcome scenario for broad-based growth as reflected in estimates of production, income, and consumption distribution. The study helps in drawing a sketch of occupational, social, regional profiles of the excluded in the mainstream growth process. Hence researcher made an attempt to provide a perspective, a measure of inclusion, and finally an evaluation based on the available estimates of consumption distribution for the year 2004-2005 for India. Agrawal (2008) studied the financial inclusion from the behavioural perspective based on both factors supply and demand end. Results revealed that evaluation from the behavioural perspective provided the scope for the policy-makers and marketers to strategically align their approach with the behavioural aspect, without confining their thoughts to the economical evaluations.

On the other hand, in 2003, the RBI policy of financial inclusion was to provide access to financial service to the underprivileged could be earmarked as another bold initiative in serving the rural transects targeting inclusive growth. Committee on financial inclusion in 2008 (Rangarajan Committee) observed that financial inclusion to hitherto excluded segments of the population was critical to sustain and accelerate growth momentum. For achievement of the objective, the committee had put forward multi-pronged strategies include establishment of National mission on financial inclusion, revitalizing the RRBs and Cooperatives, introducing MFI model (SHG-bank linkage) and Business Facilitator and Business Correspondents Model. Mukherjee and Chakraborty (2012) studied the role and efficiency of the commercial banks in Jharkhand state with their capacity and role of institutions like regional rural banks (RRBs), self-help groups (SHGs), non-banking financial companies (NBFCs) for the purpose of promoting financial inclusion. The results of analysis shown that banks were not able to achieve the desired aims and study suggested that every bank should reports to the RBI on its achievement on financial inclusion more frequently. Uma and Rupa (2013) made an attempt to examine the role of SHGs in financial inclusion and reflected the positive relationship between SHGs membership and financial inclusion. The study revealed that after the membership to SHGs there was increase in the number of bank accounts, credit availed by the members and annual repayment of the loan also shown positive trend.

Joseph and Varghese (2014) analyzed the effect of financial inclusion on the development of Indian economy by bank growth rate in terms of number of bank branches, usage of debit card and credit cards. It has been observed that the usage of debit cards increased tremendously throughout the study period and decreased 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. Ravikumar (n.d.) made an attempt to assess the role of banking sector in financial inclusion process from different viewpoints namely branch penetration, ATM penetration, population per branch, distribution of banking branches, credits, deposits of SCBs and Co- operative banks in India. This study revealed that banking is a key driver for financial inclusion/inclusive growth but large proportion of population excluded from the formal financial system also show higher poverty ratios and higher inequality. Paramasivan and Ganeshkumar (2013) discussed the overview of financial inclusion in India and concluded that branch density has a significant impact on financial inclusion. Julie (2013) analyzed the relationship between financial inclusion and economic growth in Kenya and found that both have a strong positive relationship. Economic growth has a strong positive relationship with branch networks and a weak positive relationship with the number of mobile money users/accounts. The study also concluded the weak negative relationship with the number of automated teller machines in the country and a strong negative relationship with the bank lending interest rates. Study conducted in India by Kamboj (2014) found out the positive relationship between number of bank branch networks and number of ATMs in the country with the GDP growth rate of the country.

#### III. RESEARCH GAP

The process of financial inclusion leads toward developing an environment of inclusive growth. The process supports total economic progress of

disadvantaged community members. The Indian economy requires effective financial inclusion to improve the living conditions of disadvantaged citizens through specific financial solutions and services. The process results in growth that benefits and includes all marginalized and deprived social sections. Research studies about financial inclusion exist as analysts review selected banks and the pattern of financial inclusion growth across different states. Several research investigations examined financial inclusion's effect on Indian economic expansion yet yielded blended findings. This research examines the current financial inclusion state in India while investigating its contribution to national economic expansion.

#### IV. OBJECTIVES

- 1. To examine present scenario of financial inclusion in India.
- 2. To investigate the major factors affecting access to financial services.
- 3. To study the impact of financial inclusion indicators on growth of Indian economy.

### V. RESEARCH METHODOLOGY

This study is based on secondary data that was mainly collected from Report of RBI, Ministry of Finance, Government of India, Reports on trend and progress of banking in India, Newspapers, Research Articles, Research Journals, E-Journals, Books and Magazines. Various websites were also used like RBI, Ministry of Finance, and Government of India (GoI). The period under consideration for the study is seven years from 2007–2008 to 2013–2014. Data has been analyzed by applying multiple regression as a main statistical tool. Multiple regression analysis has been used to establish an empirical relationship between Financial Inclusion and growth of the country. The present study taking Gross Domestic Product (GDP) as a dependent variable and independent variables are Number of

Bank Branches in the country, ATMs growth rate across the country and Credit deposit ratio.

Y = b0 + b1X1 + b2X2 + b3X3 + e

where Y = Gross Domestic Product (GDP)

X1 = Number of Bank Branches

X2 = ATMs growth rate

X3 = Credit deposit ratio

Hypothesis of the study

- 1. H0: There is no significant impact of financial inclusion on the growth of Indian economy.
- 2. H1: There is a significant impact of financial inclusion on the growth of Indian economy.

## Sub-hypotheses

H0 1.1. There is no significant impact of Number of bank branches on Indian GDP.

HA 1.1. There is a significant impact of Number of bank branches on Indian GDP.

H0 1.2. There is no significant impact of ATM growth on GDP of Indian economy.

HA 1.2. There is a significant impact of ATM growth on GDP of Indian economy.

H0 1.3. There is no significant impact of Credit deposit ratio on GDP of Indian economy.

HA 1.3. There is a significant impact of Credit deposit ratio on GDP of Indian economy.

Financial inclusion and Indian banking network

The RBI has encouraged banks to implement a planned and structured Financial Inclusion Plans (FIPs) for the growth and development of the country. The first phase of FIPs was covered a time period of three years which has started from 2010 and ends in 2013. FIPs have been used by Reserve Bank of India (RBI) for measuring the banks performance under their FI initiatives. Table 1 displays that a large number of bank accounts have been opened during this period and shaped a big banking network across the country. Despite, the results of first FIP witnessed that there has been insignificant improvement operations in terms of transactions. Hence, banks were instructed to draw up new three-year FIP from 2013 to 2016 for ensuring meaningful access of financial services.

Bank group and population group wise number of functioning branches as on December 31, 2014.

Bank group	Rural	Semi urban	Urban	Metropolitan	Total
SBI and its associates	7903	6510	4216	3536	22,165
Nationalized banks	20,666	15,981	12,296	11,111	60,054
Other public sector banks	338	470	455	361	1624

Private sector banks	4082	6155	4320	4429	18,986
Foreign banks	8	12	57	245	322
Regional rural BANKS	14,281	3628	1029	205	19,143
Grand total	47,278	32,756	22,373	19,887	122,294

Source: Reserve Bank of India.

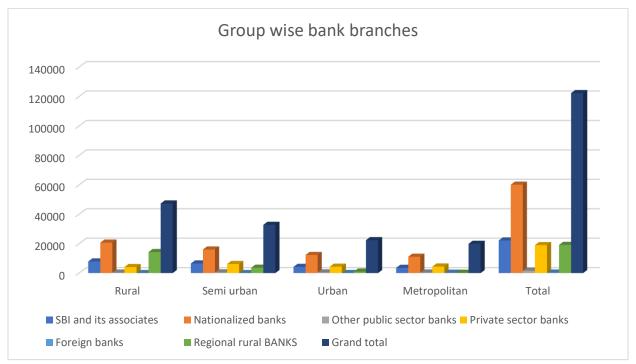


Fig. 1. Group wise bank branches. Source: Prepared by Author.

Table 1 displays that a large number of bank accounts have been opened during this period and shaped a big banking network across the country. Despite, the results of first FIP witnessed that there has been insignificant improvement operations in terms of transactions. Hence, banks were instructed to draw up new three-year FIP from 2013 to 2016 for ensuring meaningful access of financial services.

Year	GDP (Approx.)	
2007-08	4,000,000	
2008-09	5,000,000	
2009-10	6,000,000	
2010-11	7,000,000	
2011-12	8,500,000	
2012-13	9,500,000	
2013-14	10,500,000	

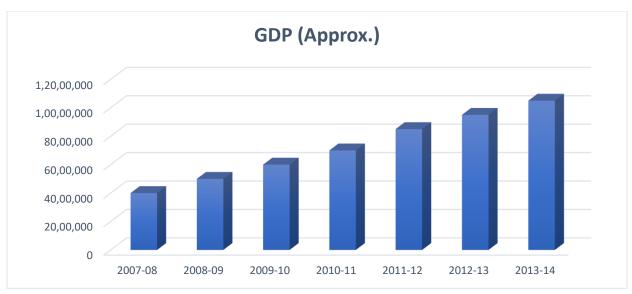


Fig. 2. Gross Domestic Product (GDP) approx.

The number of banking outlets were 115,350 opened during the period of 2013–2016 which has been increased up the total number of outlets nearly 384,000. It is demonstrated by Table 1 that the number of BCs outlets opened in urban areas have increased up to 60,730 in the year of 2014 out of which 33,587 outlets opened during the year 2013–2014. It is a significant increment in number of BCs outlets. During the year 2013–2014 the number of basic savings bank deposit accounts (BSBDAs) opened were 60.9 million and total number of BSBDAs reached up to 243 million.

The number of small farm sector credits recorded a growth of 40 million in 2013–2014 out of these 6.2 million KCCs recorded during the year 2013–2014. Along with that the number of small non-farm sector credit cards were 3.8 million during 2013–2014 and total number was 7 million over the whole period of FIP. Table 1 further revealed that the 329 million transactions were carried out in BC-ICT accounts at the end of March 2014 and recorded a growth of 79 million transactions in 2013–2014.

Table 2 shows the Bank group as well as population group wise number of bank branches in India as on 2014. From the table it is clear that all the bank groups operate more in rural areas except private and foreign banks. These groups dominate in metropolitan area with more branches compared to other area.

Fig. 1 shows the Bank group as well as population wise growth trend of number of bank branches over the India as on 31st December 2014. It is clear from the graph that SBI and its associates, public sector and regional rural banks are operateing more in rural areas compared to others. The overall growth in rural and semi urban areas is comparatively more compared to urban and metropolitan. The private sector banks dominate in semi-urban areas with 6155 bank branches whereas foreign banks dominate in metropolitan area. The total number of functioning bank branches are122, 294 across the country.

### Data analysis

The GDP stands as an essential economic metric for monitoring national growth since researchers commonly make use of it (Chithra & Selvam, 2013; Kamboj, 2014). Gross Domestic Product (GDP) of India rose to new heights over seven consecutive financial years that commenced during 2008–2009 and terminated during 2013–2014 as demonstrated via Fig. 2. These financial years brought successive growth in GDP. The financial year 2008–2009 began with GDP at 4582,086 while 2009–2010 showed GDP at 5303,567 representing a 15.75% growth from the previous year. This table indicates that India achieved its maximum yearly growth rate of 18.7% during the fiscal year 2010–2011 (Table 3).

Table 3 Variables of the study.

Years	GDP	No. of Bank branches	ATMsgrowth	Creditdepositratio
2007–2008	4,582,086	61,132	28.43	77.6
2008–2009	5,303,567	80,200	25.47	72.6
2009–2010	6,108,903	85,480	37.8	73.3
2010–2011	7,248,860	91,037	23.86	75.6
2011–2012	8,391,691	98,330	28.43	79
2012–2013	9,388,876	102,343	19.15	78.1
2013–2014	10,472,807	117,200	40.38	77.6

Source: Compiled on the basis of different publication of RBI.

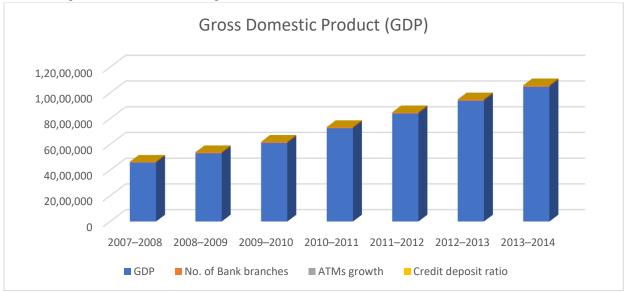


Fig. 3. Gross Domestic Product (GDP). Source: Prepared by Author.

Fig. 3 shows the trend of number of functioning branches of Scheduled Commercial Banks (SCBs) in the country. The number of bank branches has registered an upward trend throughout the seven-year period according to the visual data presented in the graph. The total number of bank branches grew from 61,132 during 2007–2008 up to 117,200 in 2013–2014. During 2008–2009 the country experienced its highest expansion (31.2%) of bank branches across India while the least expansion (4.1%) in branches occurred in 2012–2013.

The research examined Automated Teller Machines (ATMs) operating in India because they serve as indicators for financial inclusion growth. The total number of Automatic Teller Machines (ATMs) registered steady expansion between 2007–2008 and 2013–2014. All banks in the nation have observed 40.38% as their maximum expansion rate for Automatic Teller Machines (ATMs) during the time period from 2013–2014 as shown in Fig. 4. The growth rate of ATM usage reached a minimum level between

2012-2013 despite which it decreased by 28.43% to 19.5%.



Fig. 4. ATMs growth. Source: Prepared by Author.

Year	Credit-Deposit Ratio (Approx.)
2007-08	77
2008-09	72
2009-10	73
2010-11	75
2011-12	79
2012-13	77
2013-14	76

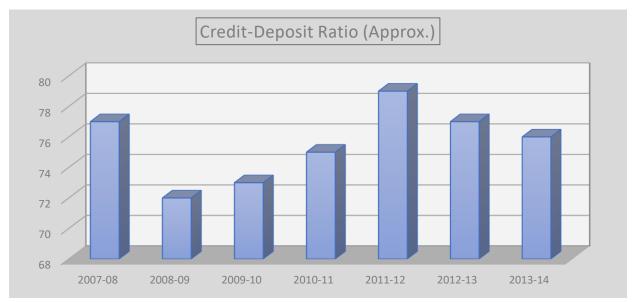


Fig. 5. Credit depositratio.

The credit deposit ratio has been tracked through Fig. 5 over seven financial years from 2007–2008 through 2013–2014. During 2011–2012 the notable rise occurred while 2008–2009 showed the maximum decrease. The credit deposit ratio showed a slight decline throughout the years 2012–2013 and 2013–2014.

Research studies identified a strong linkage between Indian economic growth and its financial inclusion performance by various indicators. The study confirms previous research by Julie (2013) which proved the essential position of financial sector development within economic growth.

#### VI. CONCLUSION

Since India belongs to developing economies, the banks hold essential roles as savings collectors as well as credit distributors to support production for investment purposes. Financial institutions function as intermediaries to drive country economic expansion through assessment of entrepreneurs who show strong potential to establish new market ventures and supply capital for their activities (Chakrabarty, 2013). The poor together with vulnerable individuals in the country see significant improvements in their financial standing and life quality through access to finance. The lack of available and budget-friendly and appropriate financial services constitutes an ongoing challenge for India while an inclusive financial system will promote national economic progress. Financial inclusion promotion by the Reserve bank of India (RBI) and the government supports national economic development through improved banking access and new Automatic Teller Machine placement together with scheme implementation across the country (Raman, 2012). Under FIPs the Reserve Bank assesses banking institution performance regarding their financial inclusion campaigns. A considerable number of bank accounts went live throughout the duration of FIPs 2010–2013. The existing banking infrastructure along with new bank accounts has shown limited activity regarding the number of performed transactions. During 2013-2016 RBI implemented a fresh threeyear FIPs system to provide meaningful banking services for excluded populations. The revised FIP directs its attention toward transaction numbers since these numbers underpin both Indian growth and development. A strong connection exists between financial inclusion and economic growth of the country (Julie 2013). Findings from this research indicated that bank branch quantity together with bank credit-deposit ratios significantly contribute to the country's gross domestic product.

Growth rates related to ATMs have no meaningful connection to the GDP of India according to statistical analysis. This study confirmed financial inclusion actively contributes to economic development throughout the national economy. Proper financial inclusion regulation is needed in the country to enable access to banking services and E-banking training and financial literacy programs must be organized for customer awareness. The success of financial inclusion demands that India builds a substantial financial road ahead to reach its goal.

#### **REFERENCES**

- [1] Aghion, P., & Bolton, P. (1997). A theory of trickle-down growth and development. The Review of Economic Studies, 64(2), 151–172. http://dx.doi.org/10.2307/2971707
- [2] Agrawal, A. (2008). The need for Financial Inclusion with an Indian perspective. Economic Research, 1–10. Retrieved from google.com [PDF].
- [3] Banerjee, A. V. (2001). Contracting constraints, credit markets and economic development. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract id=306990
- [4] Chakrabarty, K. C. (2013, September). Keynote address on financial inclusion. Mumbai.
- [5] Chhabra, N. (2015). Financial inclusion in India Thesis. Rohtak: Maharshi Dayanand University. Retrieved from http://shodhganga.inflibnet.ac.in/handle/10603/3 6960
- [6] Chithra, N., & Selvam, M. (2013). Determinants of financial inclusion: An empirical study on the inter-state variations in India. Retrieved from ssrn.com/abstract=2296096.
- [7] Dangi, N., & Kumar, P. (2013). Current situation of financial inclusion in India and its future

- visions. International Journal of Management and Social Sciences Research, 2(8.). Retrieved from http://www.irjcjournals.org/ijmssr/Aug2013/23.p df
- [8] Gounasegaran, C., Kuriakose, F., & Iyer, D. K. (2013). Financial inclusion: Progress so far, facts for you. Retrieved from http://www.efymag.com/admin/issuepdf/25-29 Financial%20Inclusion\_Sep-13.pdf
- [9] Joseph, J., & Varghese, T. (2014). Role of Financial Inclusion in the Development of Indian Economy. Journal of Economics and Sustainable Development, 5(11), 6–15. Retrieved from iiste.org [PDF].
- [10] Julie, O. (2013). The relationship between financial inclusion and GDP growth in Kenya Doctoral dissertation. University of Nairobi. Retrieved from http://erepository.uonbi.ac.ke/bitstream/handle/1 1295/58543/Oruo Financial %20Inclusion%20and%20GDP%20Growth%20. pdf?sequence=3
- [11] Kamboj, S. (2014). Financial inclusion and growth of Indian economy: An empirical analysis. The International Journal of Business & Management, 2(9), 175–179.
- [12] Kelkar, V. (2014). Financial inclusion for inclusive growth. ASCI Journal of Management, 39(1), 55–68. Retrieved from http://journal.asci.org.in/Vol.39(200910)/39 1 Vijay%20Kelkar.pdf
- [13] Mukherjee, A., & Chakraborty, S. (2012). Financial inclusion of the poor and marginalized in Jharkhand: Analysis of the existing model. International Journal on Research and Development: A Management Review, 1(1). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract id=2169673
- [14] Paramasivan, C., & Ganeshkumar, V. (2013). Overview of Financial Inclusion in India. International Journal of Management and Development Studies, 2(3), 45–49.
- [15] Raman, A. (2012). Financial Inclusion and Growth of Indian Banking System. IOSR Journal of Business and Management (May–June 2012), 25–29. Retrieved from www.iosrjournals.org

- [16] Ravikumar, T. (n.d.). Assessing role of banking sector in financial inclusion process in India. Retrieved from http://www.microfinancegateway.org/sites/defaul t/files/mfg-en-paper-assessing-role-of-banking-sector-in-financialinclusion-process-in-indiamay-2013.pdf
- [17] Rangarajan, C. (2008). Report of the Committee on Financial Inclusion. Ministry of Finance, Government of India.
- [18] Sen, A. (2000). Social exclusion: Concept, application, and scrutiny. In Social development papers no. 1. Manila: ADB.
- [19] Singh, C., Mittal, A., Garg, R., Goenka, A., Goud, R. P., Ram, K., et al. (2014). Financial inclusion in India: Select issues. In IIM Bangalore research paper no. 474 Retrieved from http://www.iimb.ernet.in/research/sites/ default/files/WP%20No.%20474.pdf.
- [20] Suryanarayana, M. H. (2008). What is exclusive about 'Inclusive Growth'? Economic and Political Weekly, XLIII(43), 93–101.
- [21] Uma, H. R., & Rupa, K. N. (2013). The role of SHGS in financial inclusion: A case study. International Journal of Scientific and Research Publications, 3(6), 1–5. Retrieved from http://www.ijsrp.org/research-paper-0613/ijsrp-p1808.pdf