



FINANCIAL INCLUSION: AN EMPIRICAL ANALYSIS OF THE IMPACT ON THE
EASTERN ODISHA REGION

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Abstract

The financial inclusion is defined as the process of ensuring access to financial services (savings, insurance, remittances, payments, etc.) and timely and adequate credit were needed by vulnerable groups such as weaker section and low income groups at an affordable cost. Globally about 70% of population is excluded from basic financial services (barclays, 2010). Countries with large proportion of population excluded from the formal financial sector so higher poverty ratio and higher inequalities (World Bank, 2006, 2008)

Financial Inclusion as remained very low in developing countries amongst India's rural poor, 70% of marginal landless farmers do not have a bank account and 87% have no access to credit from a formal source (Basu and Srivastava, 2005). Further the national sample survey organization has reported a meager 80% of poor households availing institutional borrowings (NSSO, 2006). Odisha is a state which is located eastern side of India and every year it faced a lots of natural calamities, which are well efficient to havoc the economy of some area which are closely attached to bay of Bengal. Our research is very much focused on the activeness of people towards financial inclusion and we believe these under developed area are much prone to get pool of government benefits to tackle their damaged economy.

Key words: Financial Inclusion, PMJDY, Bank Account, Loan Account

I. INTRODUCTION

The world has seen many random access of finance in various sectors with optimum utilization of financial information. While talking about India, the past era has witnessed the progress of Indian financial institution in every aspect. The inclusion of citizen to the financial track is much necessary to reach near every individual in order to promote the basic function of financial



institution. The Indian banks are much prudent enough to tackle the aspect of financial inclusion with a aim of reaching to the people at extreme corner of the country. The intention is to include every individual in order to improve not only financial assistance but also provide financial services at the door level of people. The concept of financial inclusion is not new for India, it has already introduced in the year of 2005 in the annual policy by Sri Venugopal Reddy and then by the governor. The people who are especially clubbed in a rural area, are mostly are of rustic in attitude and probably 85% are illiterate. So making them to take part in financial inclusion activity is one of the toughest works of the bankers in the country. In my study the eastern Odisha segment is chosen for investigating the impact of financial inclusion and with a very fine objective of identifying the awareness of financial inclusion among people on that region.

In Indian context most of the studies (Sharma, 2008; Sangwan, 2008) have used publicly available data to study the extend and determinants of financial inclusion. While research using primary data is limited and scarce, our paper is contained primary data from geographically calamities prone area.

Indian context:

The finance and finance related activities started in India started since the ancient times while there were kings ruled over the country. After the commencement of British ruler there was a significant development in the field of Indian Financial System that leads to the country towards the modern world of finance. There are several aspects happened in India that influences the Financial Inclusion of the country like New Economic Polic,1991 etc.. For the present times financial inclusion is the most important for the growth and development of the nation. In India Financial Inclusion as term launched by the previous RBI Governor Y.Venugopal Reddy in April 2005 at the time of presentation of Annual Policy statement. It was clear at that time that Banks have to play a major role in the sphere of Financial Inclusion. As per the data available from Census 2011, India is having population of around 1.22 billion and 65 percentages of adults across the country are excluded from the formal financial system. According to World Bank report in India only 35.2 percentage adults above the age of 15 years have an account at formal financial institutions.

Since 2005 various initiatives were taken by RBI and Government of India to make India Financially included then only a sustainable economy can be possible. Various developmental activities are performed for the financial inclusion. Mangalam a village in Tamil Nadu became the first village in India where all households were provided banking facilities. In 2006 the RBI permitted commercial banks to make use of the services of non-governmental organisation as intermediaries for providing financial and banking service, and a campaign started by commercial banks instructed by RBI that to make 100% FINANCIAL INCLUSION CAMPAIGN as pilot basis; after that states viz. Himachal Pradesh and Kerala and Union territory Pondicherry announced as 100% financial inclusion in al their districts. RBI sets its vision to open 600 million new customers' account and service them through variety of channels by leveraging on IT by 2020. The Government of India recently announced PradhanMantri Jan DhanYojna(PMJDY) on 15th August 2014 in the first Independence Day speech of Prime



minister Narendra Modi, a national financial inclusion campaign with a objective to provide bank accounts to at least 75 million people by January 26, 2015.

Trajectory of social banking initiatives in india:

In India, passing of the Co-operative Society Act in 1904 was the first effort to provide rural credit to the countries predominantly agricultural economy. Introduction of Social Control of banks in 1976, followed by nationalization of major commercial banks in 1969, to the establishment of regional rural banks in 1975 and National Banks For Agriculture And Rural Development (NABARD) in 1982, was fuelled by the philosophy of social responsibility of banking sector and part of the efforts to improve financial access for India's poor individual (Batra and Sumanjeet, 2011). The first wave of social banking in India was occurred during 1970-90 and significant rural poverty reduction is attributed to the revolutionary branch expansion (Burgess and Pandey, 2005). The Narsimhan Committee (RBI, 1991) enforced further branch expansion of the nationalized banks to be based on "need, business potential and financial viability of location". With the deregulation of banking sector in India the ratio of rural plus semi-urban branches to urban plus metro Politian branches distinctly declined (Pal and Spare, 2010).

Self-help Group (SHG) and Micro Finance Institutions (MFI) is playing a major initiates to promote financial inclusion. Before SHGs are financed directly by the banks, namely Commercial Banks, regional rural banks and co-operative banks. Later financing of MFIs by banking agencies for non-lending to SHGs and other small borrows covered under micro finance sectors (Rangarajan, 2008). As per Lidgerwood (1999) SHGs are the informal providers of micro finance services as against the semi-formal providers such as MFIs. Harper, 2002 suggests that SHGs system is more economical as it has advantage of leveraging the existing bank branches, thereby avoiding long term in MFIs

II. OBJECTIVE

The prime objective of our research is to analyze the impact of financial inclusion in the eastern Odisha, and to understand the awareness among the people about basic financial service. Again we are also aimed at understanding the impact of financial institutions in reaching at the door level of people to provide better financial services.

III. REVIEW OF LITERATURE

S.MahendraDev, 2006: How to improving the living conditions of poor farmers, rural non-farm enterprises and other vulnerable groups arid discuss a few important issues and challenges.

Navin Bhatia and ArnavChatterjee, 2010: only one third of the people were having saving account; none of them is in private bank significantly, among those who did not have a bank account, only 8% had ever tried opening a bank account but were unsuccessful, out of the respondents who did not have a bank account, only one-fifth were saving privately.

Satya R. Chakravarty, Rupayan Pal, 2012: Social Banking policy in India during 1977-1990 has been a major determinant of financial inclusion across state in India. The operational flexibility



of financial institutions following the withdrawal of social banking policy in India, also adverse consequences on financial inclusion.

DishaBhanot ,VaradrajBapat ,Sasadhar Bera,2013:Level of financial inclusion in north-east India remains very low. Income, financial information from various channels and awareness of self-help groups (SHGs), and education are influential factors leading to inclusion. Nearness to post office banks increases the likelihood of inclusion. Factors like area terrain and receipt of government benefit individually do not facilitate inclusion. However, recipients of government benefits in plain areas show increased level of inclusion.

Nitin Kumar, 2013:Branch network has unambiguous beneficial impact on financial inclusion. Both proportion of factories and employee base turn out to be significant determinants of penetration indicators. The findings reveal the importance of a region's socio-economic and environmental setup in shaping banking habit of masses. Using test for convergence it is found that regions tend to maintain their respective level of banking activity, with no support for closing gap.

HemaGwalaniShilpaParkhi, 2013: Only 38 per cent of the bank branches are in the rural areas providing coverage to 40 per cent of the country's population. So now it still needs to aware the people of India.

VighneswaraSwamy, 2013: The impact leaned positively toward women and is noticed from the fact that income growth (CAGR) net of inflation effect was of the order of 8.40% as against 3.97% for men participants.

AditiKapoor, 2013: There is low penetration of financial service and human development indicators have plummeted. There is significant poverty and high inequality; India has been unable to provide good quality skills and employability to the large youth population in earlier decades and thus to reap demographic dividend.

ShashankBansal, 2013: Financial Inclusion in true sense would mean not only to make people aware but encourage them to buy the financial products and service. The institutions must foresee the challenges lying ahead and take necessary steps to support the policies of inclusive growth.

Abul Hassan, 2014:It finds that there are some opportunities capable of improving the economic condition of the poor Muslim communities through some innovative approaches that can help the poor and turn their savings into sums large enough to satisfy a wide range of personal, social and asset-building needs as well as needs relating to small businesses and consumption.

IV. SAMPLING AND DATA COLLECTION

Odisha is a state which is situated eastern side of India map. The Bay of Bengal touches the feet of it, some area which are near to costal belt, every year they are suffering from natural calamities. So normally these places are economical backward with respect to other districts. In this research we have collected through cluster sampling method. In the eastern Odisha region, we have focused four districts which is faced at eastern side, such as, Jaipur, Kendrapara, Cuttack and Bhadrak. The respondents were the natives of such districts. Our sample sizes are two hundred and are concerned with interview method. We choose interview method with



assumption of literacy. We feel, it is more convenient, if we directly ask our research question to the respondent and capture their remark. We have asked several question regarding Government Scheme, Destination of financial Intermediaries, SHG, Ownership of Vehicle, bank Loan, Attitude of the Agent.

NAME OF THE CYCLONE	YEAR	DESTROYED
Cyclone 05B	1999	Area Affected: Balesore, Bhadrak, Kendrapara, Jajpur
Phailin	2013	Crop Loss: 17,110 kmsq House:2,75,000 destroyed Person: 9803 died
Odisha Flood	2014	House: 2,40,000 destroyed Person: 944 died
Cyclone Hudhud	2014	Crop Loss: 3 Million hector of crop. People affected: Over three million. Extensive Damage: Electrical infrastructure and house Person: 17 died

V. RESEARCH METHODOLOGY

Multiple Linear Regressions:

Study the effect on an outcome variable, y , of simultaneous changes in a number of explanatory variables, $x_1, x_2, x_3, \dots, x_n$. Assess which of the explanatory variables has a significant effect on Y . Predict Y from x_1, x_2, \dots, x_3 . Multiple linear regression may be regarded as an extension to simple linear regression when more than one explanatory variable is included in the regression model. For each individual case, there is information on his or her values for the outcome variable "y", and each of k , say explanatory variables, x_1, x_2, \dots, x_k . Usually focus is centred on determining whether a particular explanatory variable, "x", has a significant effect on y after adjusting for the effect of the other explanatory variables. Again it is possible to access the joint effect of these k explanatory variables on explanatory variables on y , by formulating an appropriate model which can then be used to predict values of y for a particular combination of explanatory variables.

The multiple linear regression equation:

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k$$

This is estimated by:



$$Y = a + b_1 x_1 + b_2 x_2 + \dots + b_k x_k$$

Where:

Y is the explained value of the dependent variable, "y" for a particular set of values of explanatory variables, X_1, X_2, \dots, X_k . a, is a constant term (the 'intercept', the value of Y when all the X's are zero), estimating the correct value, *alpha*, in the population

VI. ANALYSIS OF DATA

Variables	ResponDs	Total	Percentage
<u>Gender:</u>			
Male	132	172	76.74
Female	40		23.26
<u>Income:</u>			
Nil	72		41.86
<50,000	13		07.55
50,000-1,00,000	37		21.51
1,00,000-5,00,000	42	172	24.41
Above 5,00,000	8		04.65
<u>Education:</u>			
Illiterate	09		05.23
Under matric	26		15.11
Intermediary	51	172	29.65
Graduation	86		50.00
<u>Information:</u>			
Govt. programme	4		02.33
Mass-media	157		91.28
Friends	7	172	04.07
Others	4		02.32
<u>Govt. Benefits:</u>			
Employment guarantee scheme	4		02.33
Housing Benefits	9		05.23
Old age Pension	9		05.23
Ration Card	65	172	37.79
Null	85		49.42
<u>PMJDY:</u>			
Yes	64	172	37.20
No	108		62.80

Gender Importance:

Gender has a greater Implication on Financial Inclusion. The male respondent are more adequate than female. Eastern Odisha is labour dominated area and in management very also same gender reflects. The male are treated as the decision makers and hence take incentive by involving themselves rather female.

Literacy at a Glance:



The most respondent are from graduation level, it indicates people are more educated and hence able to interpret information. Interpretation of information is important factor for being inclusive in the economy.

Earning Level:

The earning level also implies a part of financial inclusion in a way of transaction level. The major respondents are of not having income. So it says, the inclusion part is destroyed if we consider this level. No income simply signifies that the people have no transaction activity, neither saving nor returns.

Benefit Appraisal:

The people who are allotted government benefit, they need to open a bank account for receipt of the benefit. It also refers like an important clause of financial inclusion. In our study, the majority have not received any kind of benefit. So their inclusion is not up to the mark. Hence we can say, in this aspect the financial inclusion is absent.

PMJDY:

PradhanMantri Jan DhanYojana (PMJDY) is a central government scheme. The programme is only initiated to include people in the financial inclusion through opening bank accounts. Again if we see the respondents, it is clearly seen that the majority have no PMJDY.

VII. CO-RELATION MATRIX

	BANKACT	ANNUALINC	EDU	INFO	GOVTBEN	PMJDY	SEX
BANKACT	1						
ANNUALINC	0.141984	1					
EDU	0.256781	-0.00395	1				
INFO	0.198306	-0.08386	-0.17755	1			
GOVTBEN	0.013284	-0.07021	0.307675	0.079562	1		
PMJDY	-0.07014	-0.18432	-0.16629	0.033623	-0.13849	1	
SEX	-0.02972	-0.37424	-0.13483	0.015552	0.062635	0.082104	1

The above co-relation matrix of different variable shows a linear relationship among them. The relationship of bank accounts and education shows a high co-relation (0.256).The people who seems to be more educated are much aggressive to invest in banks or other avenues. In another track, the people who are educated are categorized as employed ,hence they need a bank account for their transaction. It is also very important to understand banking and commerce for any kind of investment purpose, so that is is assumed that the people who are more educated, they can understand banking operation and investment procedure.

Again Information and bank account have also positive co-relation (0.198).The people who are well-informed about financial system are owing account in banks. The sources of financial information are generated from various newspaper, friends, social media etc. The people who



are educated, they are eligible to read, understand and logically analyse the investment avenues and role of a bank as an intermediary for financial transaction.

The study shows positive co-relation between bank account and government benefit (0.013). The study observe the people who are provided government benefit, they need a bank as an intermediary, who plays as a treasury where government deposits the benefit amount and the aspired people collect their amount. Now a day no such government benefits are released without participation of a bank.

Government benefit and information have positive co-relation (0.079) which explains the people who are more informed they are always be a part of government benefits; they can get information from various sources and make themselves involved in such benefit programme. Information also helps people to get into financial inclusion proposed scheme PradhanMantriJanDhanYojana(PMJDY) (0.033).

Gender has always an impact on government benefits and PMJDY, so it shows a positive relationship (0.064) and (0.015) respectively. It signifies that male have better access to above said variables than female. The male gender is more aggressive and adequate enough to run faster than female for availing the government benefits and PMJDY.

VIII. REGRESSION ANALYSIS

Regression Table

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.39359	0.158415	2.484542	0.0140
ANNUALINC	0.030537	0.012391	2.464441	0.0147
EDU	0.085113	0.018784	4.531073	0.0000
INFO	0.156964	0.040267	3.898082	0.0001
GOVTBEN	-0.025447	0.017362	-1.465666	0.1446
PMJDY	-0.003789	0.032799	-0.115529	0.9082
SEX	0.047604	0.039617	1.201614	0.2312
R-squared	0.171051	Mean dependent var		1.011628
Adjusted R-squared	0.140907	S.D. dependent var		0.215981

Indian economy is one of the most vibrant and structured economy of the world. The financial crises was witnessed the serious downfall of markets and unexpected fluctuation of price movements. The Indian scenario was quite different that India has rescued herself from such havoc, as the Indians are much conservative.



The Indians are happy to keep their money in Almirah rather in banks. In our study education of the people, available information and annual income has greater impact on financial inclusion. The people who are more educated are much aware about financial inclusion and they are economically tired with financial atmosphere. The dependent variable Bank account explains the inclusion of individual's financial aptitude with banks. So education plays an important role not only strengthening the wisdom but also actively participates and optimizes the goal of people's finance. Investment is a rational decision by the people to increase the return with minimum risk, again human mind is much aggressive and focused where their investment is much more secure and give a maximum return.

For such investment a well-equipped pool of information is required and in the same time the decoding capacity of human being to understand the information is highly essential. So the people who are more informed they can invest in either banks or any other investment avenues, where bank may play as intermediary or parent focus. After the financial crises many awareness programme were organized by RBI and Government of India to understand people about investment and banking and many more affords taken by the above institution to make banking easier. So the people, those who earn income are keeping money in bank, may be it is called as deposits or investment. The four concerned district which we have covered in our study has no found no impact of PMJDY and Government benefits. The people who are financially included are not due to above to reason.

IX.CONCLUSION

The financial inclusion is an wider stand concept, the in-depth we visit, the journey will be more crucial and useful. The prelude research on impact of financial inclusion in eastern Odisha has indicated vary poor implementation and application of financial inclusion. We have framed various tool to measure the overall relations, but the results is not in favour of it. We have an expectation, thoughtit's a calamity prone area, the government subsidy may enable the financial inclusion in robust way. But the result ultimately has shown that the majority of people have neither received Government Benefit nor PMJDY account.

X. IMPLICATIONS

- So have we in a stage, where government is making policy after policy to enhanced financial inclusion, butthere are some areas, where thereach of banks is not adequate.
- It is very much essential, to make people understand about characteristics of banks. Most of the people thinks that if they put their money in a bank, bank will eat away their money.
- The Chit-fund corruption is aggressively stretching its kingdom in Odisha. It neither damage the economy at the same time, it destroy the trust of the poor farmer whose small money is considered is a diamond.
- It is again a role of "Developmental Finance" where we can approach suitable and understandable model for the small investors who can easily step into the financial inclusion.



- Again, promoting, educating people is very much essential, where financial inclusion can be done in a rational way rather forcing it to sustain.

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