Manjeet Singh, Surinder Singh, Ranjeet Kumar Raman, Rahul Thakur, Inder Puneet Johar, Parambir Singh

#### **Abstract:**

Reserve Bank of India devised initiatives to provide affordable and easy financial services to not only the privileged ones but also to the ignored and neglected sections of our society. Regardless of their personal net worth or the size of their organization, all individuals and organizations should be able to access and afford financial products and services according to the determinants of financial inclusion. Financial penetration is a relative small term which is used to represent the share of one credit agency relative to that of others in the credit market. In other words we can say that financial penetration is expressed in terms of loans availed by the household from different sources of credit institutions and non-institutional financial sources. As the union territory of Jammu and Kashmir comprises of different topographic and demographic regions, which include the plains, mountainous and snow-bound areas, the financial facilities are not evenly distributed all over the geographical areas of the union territory of Jammu and Kashmir. This study is confined to territorial areas of district Jammu. Many isolated villages struggle to meet their basic financial demands as a result of the lack of banking facilities. Following this scenario, to ascertain financial inclusion level of the region, a study was done using three different perspectives, including credit penetration, deposit penetration and branch penetration in remote regions of all blocks of district Jammu in the UT of Jammu and Kashmir.

**Keywords:** Banking, Branch Penetration, Business Correspondents, Credit Penetration, Deposit Penetration, Financial Inclusion

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### 1. Introduction

Jammu district is having a topography which includes the Kali dhar forest range, pir panjal mountainous range, hilly terrain, plains and is enclosed by international borders and line of actual control (LOC). Financial inclusion is an effort to encompass the masses with timely and accessible financial services and it involves providing financial services to societal sectors that are not already served by formal and informal financial bodies. According to RBI's annual report (2018), rural India contribute towards economic growth by way of services, agriculture, selfemployment, creating assets under "Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)", thereby creating avenues of employment. A number of schemes are being operated by government of India in the rural areas like 14<sup>th</sup> Finance commission, 15<sup>th</sup> finance commission, BADP (Border area development program), SBM (Swatch Bharat Mission), Model village, Mission Antodaya, Back to village program. All these programmes and schemes are implemented in all the rural development Blocks of district Jammu. One big obstacle in the effective adoption of these rural developmental schemes is the low financial inclusion in some blocks of district Jammu. It is well known fact that the financial outreach programme is successfully implemented in the urban and metro cities, but as far as the rural areas on whole and Jammu district in particular is considered for financial inclusion, the picture is different. The rural areas of District Jammu still lag behind about the awareness of the financial services and facilities. Rural areas are not necessarily having the bank branches; they may or may not be having the business correspondents. Rural masses in general and low income groups/students/small farmers/landless labor/casual labour in specific individuals were unable to timely obtain financing to cover their basic and time - sensitive needs. District Jammu comprises of 20 rural developmental blocks, which have different levels of financial penetration.

The rural credit financial institutions which operate in district Jammu comprise of mainly formal credit sources and informal sources of rural credit. The informal sources of finance are the traditional money lenders, friends, relatives and the formal sources of finance are the commercial banks, cooperative banks, self help groups, cooperatives and rural banks. The informal sources of credit are still operative in the rural areas along with formal sources of credit (Laha and Kuri, 2014; Rao and Budde, 2015). The formal credit sources are controlled by Reserve Bank of India, there are proper rules and regulations which govern the formal credit institutions but there is no governing body which controls the functioning of the non formal sources of credit. The formal sources of credit provide the credit at low rate, proper documentation, collateral specifications and flexible modes of payments and repayment (Kumar and Pandey, 2018; Kumar and Ayedee, 2018). They provide cheap and affordable credits with common terms of credit for all; however, informal sources of credit give credit at their discretion and at outrageous rates, no proper legal documentation or regulations are there.

There is no controlling body to regulate the functioning of the non formal sources of credit. The picture in the rural India is somewhat more complex. The banking system has flourished in last 5 decades but when it comes to the question of financial inclusion, the banking industry has not penetrated in the rural India satisfactorily (Reserve Bank of India report 2011). One more trend observed in this regard is that the share of money lender (Agricultural and Professional) declined steadily from 69.7% in 1951 (All India rural credit survey 1954) to15.7% (48th NSSO round in 1991) and it again rose to 29.6% in 2002 (NSSO 59th round). The NSSO in the 59th round on all India debt and investment survey (AIDES 2002) has revealed a startling fact that money lender is the main supplier of the rural credit. The fall in the percentage of share of

commercial banks during the 90's has raised many eyebrows. In the modern busy times everyone is experiencing the need of financial services in one form or in other. The financial services may be in the form of credit, debit, credit transfer, RTGS, overdraft, demand draft, saving accounts, current deposits, fixed deposits etc, credit requirements, debit cards and ATM cards. During the 1990's a steep fall in the share of commercial banks was observed due to general rigidities in procedures and systems of institutional credit, only four states H.P, Assam, then J&K state (now Union Territory of J&K) and Kerala had showed a rise in share of Commercial banks during that period, but the remaining states showed a declining trend (Garg and Agarwal, 2014; Kumar and Aggarwal, 2018; Kumar and Ayedee, 2021).

The percentage share of moneylenders (Agricultural and professional) during 1990's declined only in three states (Himachal Pradesh, then Jammu and Kashmir State (now Union territory of Jammu and Kashmir) and Maharashtra. Rest of the then 12 states witnessed a rise in the share of traditional money lenders, on the other side a large population particularly in rural areas had been brought under the rural credit obtained by the rural masses in hope of better returns. The array of credit facilities being offered is directly influenced by sources of rural credits. A credit facility which is obtained from formal sources of rural credit is flexible whereas the inverse relation is observed in case of non formal sources of rural credit (informal sources of rural credit). Government of India took a number of initiatives for promoting financial penetration but the target of financial penetration has not so satisfactorily been achieved in rural areas due to strong hold of informal sources of rural credit (Money lenders, village heads, Arhties, agricultural middlemen etc, outlook of masses, easy access, readily availability etc). The financial sources which operate in the rural areas of Jammu are formal and informal sources of finance. The rural pockets of district Jammu have witnessed a change in the requirement of credit for sole farming to other segments of the allied farming occupations and small businesses. So the banks, which are instrumental in implementing the agenda of financial inclusion, have reached to the possible pockets of rural Jammu.

Banking industry can only provide a route for persons in low-income and rural areas to meet their credit demands. Referring to the annual report published by RBI (2017), creation of bigger network of rural bank branches will cultivate a habit of saving in rural masses and thereby encourage them to make progress of their enterprises, farms etc by taking advantage of various government schemes and will eventually increase financial inclusion level in far flung areas of society (Garg, 2015; Sharma and Kukreja, 2013). The RBI has developed a unique modus operandi to reach the untouched rural areas by way of creating Business Correspondent (BC). To encourage savings, this model serves as a liaison between commercial banks and the poor people. Hence, raising knowledge of the numerous goods and services that banks offer (Mol, and TP, 2014; Koorse and Kavitha, 2015). The BC Model educates rural residents about banking credit options such as no-frills agricultural loans for farmers, modest borrowing limits, and basic savings deposit account options for rural residents (Tamilarasu, 2014; Peisker and Dalai, 2015). In wake of new technology the commercial banks are trying to reach the account holders by various ways which include the e-banking, UPI, Gpay, Blockchain technology etc, which help the banks to increase their trade and potential to satisfy the demands of its customers in an efficient way.

# **Objectives of Study:**

The current study is focused to find level of bank branch penetration, availability of banking services and facilities, and the use of such services as savings/deposits accounts, current accounts

and credit services in the entire blocks of district Jammu. To achieve this goal, two objectives have been outlined below:

- 1. To examine the factors determining financial inclusion in Jammu district's rural areas.
- 2. To rank the blocks of district Jammu based on scores achieved on financial inclusion index.

## 2. Methodology

## Conceptualizing the Factors Quantifying the Degree of Financial Inclusion

CRISIL Inclusix, "an index to measure India's progress on financial inclusion" has considered three parameters for measuring financial inclusion index. A report on the financial inclusion for all 625 of India's administrative districts was released by CRISIL in June 2015. Bank penetration, credit penetration, and deposit penetration were the three factors used to gauge the financial inclusion level. For Financial Year 2012-13, the financial inclusion index is created at all levels of the administrative, geographic, and political hierarchy, including the national, state, regional, and district levels. According to the CRISIL Report, India's total Financial Inclusion Index is 50.1. The demand and supply for credit were used as metrics to determine the financial inclusion level.

It was and still a practice to determine financial inclusion index by considering various inputs and variables like the taking the (i) Number of Bank Savings Accounts per 100000 residents (ii) Deposits made in the banks by customer by any mode like transfer of amount/RTGS/self deposit etc (iii) Amount of Banks' Credit made available/ forwarded per 100000 residents, Number of ATMs utilized by Population (in Millions) and number of Mortar and brick Bank branches (per million residents). A study had been done in Indian state of Punjab by taking rural districts of Punjab to calculating the index of financial inclusion for FY 2009-2010. Present study considered only three basic parameters (i) "Penetration of Bank Branches" and (ii) "Usage of Banking Services" and (iii) "Availability of Banking Services" (Kainth, 2013; Behl and Pal, 2016).

The study has been conducted in Union Territory of Jammu and Kashmir by taking various aspects of financial inclusion. Various rural development blocks of district Jammu of Union Territory of Jammu and Kashmir were taken for calculating FII (Financial Inclusion Index). The study considered both sides of the business process viz demand as well as supply. In this current study, primary information from the supply side was collected from banking and non banking financial institutions, and data from the demand side was collected from people who utilize banking services. The customized index for the 20 rural development blocks of district Jammu in the Union Territory of Jammu and Kashmir is used to determine extent of financial inclusion by taking four parameters into consideration, including the volume of bank branches, the volume of business correspondents, as well as credit penetration (Laha, Kuri, and Kumar 2011; Sriram and Sundaram, 2015).

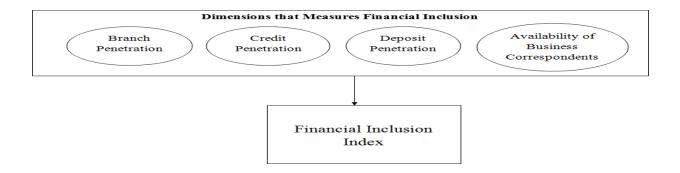
Financial Inclusion Index Scores on the financial inclusion index. Different Rural Development Blocks in the Union Territory of Jammu and Kashmir's District Jammu. The study's financial inclusion index was calculated using four different parameters, including 'bank penetration', 'deposit penetration', 'availability of business correspondents', and 'credit penetration', for rural areas of J&K UT in the year 2021. The researcher has gathered secondary data on these four dimensions. Table 1 lists variou indicators for FII. Information for Table 1 was gathered from two websites: the SLBC (State Level Bankers Committee) website for Jammu and Kashmir and the RBI's report on Database of Indian Economy. District Statistical Handbook and the village

amenity directory of the blocks in the district of Jammu were used to compile data on all of the blocks' rural populations.

## **Index of Financial Inclusion (IFI)**

Four distinct dimensions and four distinct parameters make up the study. Since the study uses a variety of measurement units, the dependability will be determined for each parameter. As a result, it needs to be normalized in the formula stated below using the Min-Max approach.

$$Xi(Normalized) = \frac{Xi - X(Min)}{X(Max) - X(Min)} \times 100$$



**Table 1 Dimensions measuring FII (Financial Inclusion Index)** 

Dimension	Branch	Business	Credit	Deposit
	Penetration	Correspondent Model	Penetration	Penetration
	(Rural Areas)	(Rural Areas)	(Rural Areas)	(Rural Areas)
Parameter	Bank	Business	Loan	Savings
	Branches/1,00,000	Correspondents/1,00,000	Accounts/1,00,000	Accounts/1,00,000
	residents	residents	residents	residents
Significance	Measuring Banking facilities in rural development blocks of District Jammu	Measuring Business Correspondents availability for rural residents	Measuring credit facilities given to the rural residents	Measuring accessibility of Banks financial services by the rural people.

"Normalization is a technique by which different variables can be compared at the same scale, for this each score/value of data is converted in a whole number between 0 and 100. X (max) represent the maximum value that has been observed over all the blocks of district Jammu for a particular parameter. The data of each parameter of all the Blocks has been reduced/normalized/converted between the numbers of 0 to 100 by using the Min- Max method of normalization. This technique of Normalization explains that a Score/value of 100 is the best performer for the particular parameter of the Block 'i' and a Block scoring a value of '0' is the

worst performer for the particular parameter of the district Jammu. Each and every Block of District Jammu is characterized by the particular point in dimensional space (0, 0, 0, 0) to (100,100,100). The value of index of financial inclusion of rural areas in Blocks of District Jammu is measured using the formula":

Index of Financial Inclusion (IFI) = 
$$100 - \sqrt{(100 - BP)^2 + (100 - CP)^2 + (100 - DP)^2 + (100 - BC)^2}$$

BP = Branch Penetration measuring dimension

CP = Credit Penetration measuring dimension

DP = Deposit Penetration measuring dimension

CP = Business Correspondent Model measuring dimension

#### Financial Inclusion Index Scores from the CRISIL

CRISIL Inclusix is being enumerated in Table 2 below. Based on the score of the index, the researcher can classify rural development blocks and give ranks according to their performance for a particular parameter as well as the dimensions which can quickly determine the outcomes of the region depending on scores achieved at specific parameters. Present research has been successful in ranking the Rural Development Blocks depending upon individual parameters. Consequently overall score of the scores has been deliberated so that the blocks can be ranked accordingly. Many studies have employed CRISIL index scores to understand the various parameters of Financial Inclusion at different study areas, which has yielded substantial results to support the foundations of CRISIL index (Kolloju, 2014; Islam, et al., 2014; Tandon, Chaturvedi, and Chaturvedi, 2015)

Table 2 Index scores of financial inclusion based on CRISIL Inclusix

Index Score	>55	Between 40.1 and 55.0	Between 25.0 and 40.0	<25
Financial Inclusion Level	High	Above Average	Below Average	Low

Source: CRISIL Report 2015

#### Dimension 1: Branch Penetration

Scheduled banking and non-banking organizations by Government act as boosters for improving economic as well as social conditions of the region. Thereby reducing the economic and social inequality among the rural masses. It has been seen in the study that the banks and other formal financial institutions like Commercial Banks, Cooperative Banks, state financial corporations

,women development corporations, SC/ST development corporations. There is a need to increase the number of conventional bank branches in the non urban regions. Financial inclusion is bound to get increased with an increase in branch penetration by banks in far off places as well. As bank branches grow in number, the weaker segments of society will become more motivated to save money. Savings are directly proportional to number of accounts which in turn depends on the availability of the nearest banking services, Branch penetration is a prerequisite for the considerable/significant financial penetration.

## Dimension 2: Credit Penetration

Financial Inclusion can be termed as the efforts to provide timely and affordable financial and banking services to the neglected people. Financial inclusion has a main aim to cater the poor masses with affordable and cheapest financial services. The rural people are also bought under the envelope of financial inclusion and formal financial institutions are providing the impoverished with timely loan opportunities in order to enhance their welfare measures (Tamilarasu, 2014; Peisker and Dalai, 2015). In this wake Commercial Banks have taken initiatives with collaboration of Govt. of India to provide Credit Cards (KCCs & GCCs) to the farmers for meeting emergency credit necessities. On the other hand Govt. is also taking strong steps to provide facilities to poor and working masses from formal financial institutions by introducing various govt. programs like MGNREGA and wages are executed for developmental works through PFMS (Public fund management system). These initiatives strengthened financial inclusion like banks on one hand and proved to be boon for masses.

# Dimension 3: Deposit Penetration

RBI has directed all the scheduled financial institutions to give boost for opening the No frills accounts for the unprivileged and poor sections of the society .This initiative of implementing the FIPs (Financial Inclusion Plans) has suggested that Commercial Banks open Basic Saving Deposit Accounts, often known as No-Frills Accounts to encourage the general public to save and form a saving habit. Banks has carved out financial services like bank accounts with a facility to take overdraft so that the poor masses can meet their basic needs.

# Dimension 4: Availability of Business Correspondents

To simplify financial services and raise knowledge of banking products and services among rural populations, the RBI devised the business correspondent model. For the successful adoption and implementation of this model, RBI has directed scheduled financial institutions (Banks) to appoint Business Correspondents (BCs). These BCs shall work as mediators between rural population and the financial institutions. BCs are given the responsibility of those rural populations which do not have any brick and mortar branch, in this sense the business correspondents are allowed to encourage the rural masses to come under the ambit of financial inclusion. The basic responsibility of business correspondent is to make the masses aware of the various banking services.

## 3. Results and Discussion

Table 3 depicts Financial Inclusion Index Scores in non urban regions of different blocks of District Jammu of Union territory of Jammu and Kashmir. As per the scores fetched by various Blocks it is being prominently depicted that R.S Pura Block has achieved 84.35286 which happens to be the maximum score in rural areas for financial inclusion.

The next blocks with index of financial inclusion greater than 55 are the blocks Kot Bhalwal, Satwari, Suchetgarh, Nagrota, Pargwal, Arnia and Khour. The Blocks Phallian Mandaal and Bishnah lie in the category "above average" level (40.1-55) of financial inclusion. The blocks Marh, Samvaan, Chowhi Choura and Mathwaar have below average level (below 25) of financial inclusion. Remaining blocks except Bhalwal Bhramana have financial inclusion at very low level. Block Bhalwal Brahmana has the least Financial Inclusion Index score.

Block Kharah Balli having a population of 15137 has very less level of branch penetration (0.00). In rural areas like Kharah Balli where there is no bank branch in the entire block this aspect increases the chances of level of deposits and credits as well as availability of Business Correspondents.

Block Name	Population in the Block	Dimension 1: BP (Branch Penetration)	Dimension 2: CP (Credit Penetration)	Dimension 3: Dp (Deposit Penetration)	Dimension 4: BC (Business Corresponde nts)	Index of Financial Inclusion (IFI)	Rank
Pargwal	15637	53.57	17.99	70.58	99.56	56.43	8
Marh	86964	52.98	98.75	19.21	18.09	29.38	16
Khour	55515	37.72	76.68	60.30	47.23	56.16	9
Khrah Balli	15137	0	00.00	19.26	14.04	11.54	19
Bhalwal Brahmana	35772	36.22	45.76	0.29	0	9.33	20
Samwaaan	15903	24.15	13.80	27.40	53.12	34.62	14
Chouki choura	16740	50.04	17.61	12.68	46.60	29.08	17
Mathwar	21514	38.94	16.33	0.002	83.38	33.76	15
Mairi Maandrian	20555	32.62	11.38	20.91	23.60	19.71	18
Kot Bhalwaal	51968	80.60	95.76	89.19	42.43	58.88	6
Nagrota	61379	61.41	91.32	72.81	46.60	59.63	5
Phllain Mandaal	32285	38.92	38.21	22.79	72.60	46.89	12
R.S pura	53103	74.40	90.39	100.29	78.94	84.35	1
Dansal	33903	37.06	50.92	46.82	85.85	62.46	4
Miran sahib	55174	60.81	81.28	5.58	85.60	50.80	11
Suchetgarh	54365	30.81	76.79	38.93	62.59	57.96	7
Satwaari	33993	36.96	60.71	47.10	85.41	65.48	3

Bishnah	82138	85.76	100.00	21.74	48.95	46.77	13
Arnia	27298	92.06	76.68	39.85	100	67.74	2
Akhnoor	50264	100	85.64	43.36	46.49	52.19	10

Table 3 Financial Inclusion Index in Jammu district rural block areas

Table 4 has illustrated that the only six blocks namely Arnia, Bishnah, Kot Bhalwal, Nagrota, Miran Sahib and R.S Pura have branch penetration at higher level (> 55). Three blocks namely Pargwal, Marh and Chowki Choura have branch penetration at above average level (40.1 - 55.0). Rest blocks have below average financial inclusion level. Block Kharah Balli has zero level of branch penetration. Block Samwan has low branch penetration index for the year 2020

Name of the District	Population	Bank Branches/1,00,000 rural population	Branch Penetration (Normalized )	Rank
Pargwal	15637	12.79	53.57	8
Marh	86964	12.64	52.98	9
Khour	55515	9.006	37.72	13
Khrah Balli	15137	0.00	0	20
Bhalwal Brahmana	35772	8.64	36.22	16
Samwaaan	15903	5.76	24.15	19
Chouki choura	16740	11.94	50.04	10
Mathwar	21514	9.29	38.94	11
Mairi Maandrian	20555	7.78	32.62	17
Kot Bhalwaal	51968	19.24	80.60	4
Nagrota	61379	14.66	61.41	6
Phllain Mandaal	32285	9.29	38.92	12
R.S Pura	53103	17.76	74.40	5
Dansal	33903	8.84	37.06	14
Miran sahib	55174	14.51	60.81	7
Suchetgarh	54365	7.35	30.81	18
Satwaari	33993	8.82	36.96	15
Bishnah	82138	20.47	85.76	3

Arnia	27298	21.97	92.06	2
Akhnoor	50264	23.87	100	1

# Table 4 Branch Penetration level in Jammu district rural areas

Table 5 depicts above average credit penetration level (> 55) for ten blocks which are: Marh, Khour, Kot Bhalwaal, Nagrota, R.S. Pura, Arnia, Akhnoor, Miran Sahib, Suchetgarh, Satwaari and Bishnah. The blocks Bhalwal Brahmana and Dansal have credit penetration level at above average (40 - 50). Block Phallain Mandaal has credit penetration at below average level while rest of the blocks had credit penetration at a very low level. Block Mairi Mandrian has least credit penetration level.

District Name	Population( 2011 census)	Actual Number of Loan Accounts 2020	Loan Accounts/1,00,000 rural population (calculated)	Loan Accounts (Normalized)	Rank
Pargwal	15637	1558	9963.54	17.99	15
Marh	86964	24938	28676.23	98.75	02
Khour	55515	13081	23563.00	76.68	09
Khrah Balli	15137	877	5793.75	00.00	20
Bhalwal Brahmana	35772	5866	16398.30	45.76	13
Samwaaan	15903	1430	8992.01	13.80	18
Chouki choura	16740	1653	9874.55	17.61	16
Mathwar	21514	2061	9579.80	16.33	17
Mairi Maandrian	20555	1733	8431.03	11.38	19
Kot Bhalwaal	51968	14543	27984.52	95.76	03
Nagrota	61379	16544	26953.84	91.32	04
Phllain Mandaal	32285	4729	14647.66	38.21	14
R.S pura	53103	14199	26738.60	90.39	05
Dansal	33903	5965	17594.31	50.92	12
Miran sahib	55174	13589	24629.35	81.28	07
Suchetgarh	54365	12823	23586.86	76.79	08
Satwaari	33993	6752	19862.91	60.71	11
Bishnah	82138	23791	28964.66	100.00	01

Arnia	27298	6432	23562.21	76.68	10
Akhnoor	50264	12887	25638.62	85.64	06

# Table 5 Credit Penetration level in Jammu district rural development blocks

Table 6 shows that the block R.S Pura has scored 1st Rank by achieving highest deposit penetration level (100.2944). Blocks Akhnoor, Dansal and Satwari have above average level of deposit penetration (40 - 50). Blocks Samwaan and Suchetgarh have below average level deposit penetration (25 - 40). Pending blocks have lowest deposits penetration levels, while block Mathwar has the least rank.

Name of the District	Population	Actual Saving accounts (2020)	Deposit Accounts/1,00,000 rural population	Deposit Penetration (Normalized)	Rank
Pargwal	15637	8973	57383.12	70.58	4
Marh	86964	32698	37599.46	19.21	16
Khour	55515	29658	53423.39	60.30	5
Khrah Balli	15137	5694	37616.43	19.26	15
Bhalwal Brahmana	35772	10843	30311.41	0.29	19
Samwaaan	15903	6481	40753.31	27.40	11
Chouki choura	16740	5873	35083.63	12.68	17
Mathwar	21514	6497	30198.94	0.002	20
Mairi Maandrian	20555	7863	38253.46	20.91	14
Kot Bhalwaal	51968	33546	64551.26	89.19	2
Nagrota	61379	35749	58243.04	72.81	3
Phllain Mandaal	32285	12584	38977.85	22.79	12
R.S pura	53103	36549	68826.61	100.29	1
Dansal	33903	16352	48231.71	46.82	7
Miran sahib	55174	17848	32348.56	5.58	18
Suchetgarh	54365	24569	45192.67	38.93	10
Satwaari	33993	16432	48339.36	47.10	6

Bishnah	82138	31684	38574.10	21.74	13
Arnia	27298	12434	45549.12	39.85	9
Akhnoor	50264	23573	46898.37	43.36	8

## Table 6 Deposit Penetration level in Jammu District Rural Development Blocks

Table 7 has illustrated that the block such as Pargwal, Mathwar, Dansal, R.S. Pura, Phallian Mandal, Miran Sahib, Suchetgarh, Satwari and Arnia having highest availability (> 55) of BCs (Business Correspondents) in rural areas. Availability of BCs was found to be more than average (40.1 - 50.0) in the blocks Choki Choura, Khour, Samwan, Kot Bhalwal, Nagrota, Bishnah and Akhnoor have the availability of business correspondent index level between 40 and 55. The rest of blocks had low level of Business Correspondents availability.

Block Name	Rural Population	Actual Number of Business Correspondent	Number of Business Correspondent/1,00, 000 residents	Business Correspondent (Normalized)	Rank
Pargwal	15637	4	25.58	99.56	2
Marh	86964	12	13.79	18.09	18
Khour	55515	10	18.01	47.23	12
Khrah Balli	15137	2	13.21	14.04	19
Bhalwal Brahmana	35772	4	11.18	0	20
Samwaaan	15903	3	18.86	53.12	10
Chouki choura	16740	3	17.92	46.60	14
Mathwar	21514	5	23.24	83.38	6
Mairi Maandrian	20555	3	14.59	23.60	17
Kot Bhalwaal	51968	9	17.31	42.43	16
Nagrota	61379	11	17.92	46.60	13
Phllain Mandaal	32285	7	21.68	72.60	8
R.S Pura	53103	12	22.59	78.94	7
Dansal	33903	8	23.59	85.85	3
Miran sahib	55174	13	23.56	85.60	4
Suchetgarh	54365	11	20.23	62.59	9

Satwaari	33993	8	23.53	85.41	5
Bishnah	82138	15	18.26	48.95	11
Arnia	27298	7	25.64	100	1
Akhnoor	50264	9	17.90	46.49	15

Table 7 Business Correspondents availability in Jammu district rural areas

# 4. Conclusion, Limitation and Recommendations

#### 4.1 Conclusion

The Financial Inclusion is an anticipated route to cover underprivileged and poor masses under the ambit of the financial services at affordable cost or at zero cost and to bring persons from the financially excluded and underserved societal groups into the established financial system. To increase the financial inclusion level in Indian society, the government has implemented a number of programs at the national and state/UT levels. But every block in every state of our nation's rural areas needs to be given careful study. The study found that there one of the blocks namely Kharah Balli do not have even a single brick and mortar branch in 2020, and a majority of the blocks have average and Financial inclusion is extremely low except a few. Thus it is an eye opener for the various formal financial agencies to consider the low level of financial penetration and take steps for the improvement of the financial penetration index so that the more and more masses are bought under the umbrella of the financial inclusion and hence financial penetration. Therefore, the Government and the relevant financial sector authorities should pay attention to those rural areas for accelerating the delivery of banking products to non urban marginalized people and give them access to affordable banking goods and services.

### 4.2 Limitation

Like any other study, this research has certain limitations that open up possibilities for further investigation. First, the sample size and sampling technique used in this research might not be able to eliminate rural and urban bias entirely. Second, this research is limited to 20 rural blocks of district Jammu and need to be extended to more rural and urban blocks of Jammu. A detailed comparison of financial inclusion between rural and urban blocks of region can be useful for the decision makers in future. The final limitation is the period and duration of time for which the data was gathered. The rural areas of district Jammu is evolving in terms of development aspects. Much development has happened after data has been collected, thus, the data might not be able to present the current circumstances of financial inclusion of district Jammu.

#### 4.3 Recommendation for Future Research

This study offers a lot of opportunity for researches in future to investigate financial inclusion specially focusing on developing countries. Some considerable recommendations which can be taken up for future prospective research are as under: First, in order to generalize outcomes of the study, it may be replicated by taking a bigger sample size. Second, this research may also include both demand and supply-side stakeholders in order to evaluate financial inclusion in the region. Lastly, to find out the prognostic influence of the financial inclusion, future research may investigate issues such as impact of financial inclusion on quality of life, socio-economic prosperity, and so on.

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