

**An Evaluation of Financial Inclusion of BPL families: A Case Study of Jalandhar, Sangrur and Gurdaspur districts of Punjab**

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**Abstract**

In India 'Financial Inclusion' has become significant after the Reserve Bank of India declared a series of measures in its credit policy during 2006-07. It has entered in banking vocabulary for implementation after 2008 with the recommendations of Rangarajan Committee. Financial inclusion has been discussed in academic circles, in academic research, public policy summits and conferences. It has gained attention due to its important role in supporting economic development of the developing-economies. Access to easy, safe and affordable credit and to different financial services for the vulnerable sections of the society has been accepted as a pre-condition for achieving other policy goals such as objective of income equality and reduction of poverty. The present paper evaluated the impact of financial inclusion on beneficiaries of selected districts of Punjab whose accounts were opened under financial inclusion drive after 2007. The Study covered three districts namely Jalandhar, Sangrur and Gurdaspur of Punjab. It also evaluated the nature and extent of financial inclusion in Punjab. The study is based upon primary as well as secondary data. Per centage and Head count index has been calculated to achieve the objectives. The study found impact on poverty as very low. Though value of Head Count Index, Poverty Gap and Poverty Gap Index has declined over the period of time but this change is recorded for a few respondents. The study recommended that RBI and other financial authorities must focus on financial inclusion to get rid of the poverty especially of BPL.

**Keywords:** *Financial Inclusion, Poverty, BPL families, Poverty Gap, Financial system, Poverty Gap Index*

## **Introduction**

India boasts of a comprehensive and robust financial system that has supported the economic progress seen in the last two decades. A report by The Boston Consulting Group (BCG) in 2007 established that barely 34 per cent of its population has access to formal banking services and stood at second position for financially excluded households in the world at about 135 million (Naik, Priya 2013). A vast majority of the population, especially in rural areas, is excluded from the easy access to finance (Gounasegaran, Kuriakose, & Iyer, 2013). Forty per cent of the households reported having bank accounts and only 38 per cent of the 1, 17,200 branches of Scheduled Commercial Banks are catering to the financial needs of people living in rural areas. Reserve Bank of India has been continuously promoting the banking sector to expand the banking network both by setting up of new branches and installation of new ATMetc. (Dangi & Kumar, 2013).

“Financial inclusion is the process of ensuring access to appropriate financial products and services needed by all sections of society including vulnerable groups such as weaker sections and low-income groups at an affordable cost in a fair and transparent manner by mainstream institutional players” (Chakrabarty, 2013). In India, it has entered in banking vocabulary for implementation after 2008 with the recommendations of Rangarajan Committee.

Although, there is an international consensus on the importance of access to financial services as a poverty mitigation tool, a large segment of society still can't access to both formal and informal sources of finance (United Nations, 2006). Almost half of the world population still does not have a basic bank account (World Bank, 2014). Globally, research studies have established that the absence of financial access can lead to pangs of poverty and income inequality (Banerjee and Newman, 1993; Galor an Zeira, 1993; Beck Demirg -Kunt and Levine, 2007).

Financial inclusion can have significant benefits for individuals. Globally, research studies have established that the absence of financial access can lead to pangs of

poverty and income inequality (Banerjee and Newman, 1993; Galor and Zeira, 1993; Beck Demirg -Kunt and Levine, 2007). In addition to it, literature has pointed out the positive impacts of access to saving instruments on growth of savings (Aportela, 1999; Ashraf et al. 2010a), on productive investment (Dupas and Robinson, 2009), on consumption (Dupas and Robinson, 2009; Ashraf et al., 2010b), and last but not the least on female empowerment (Ashraf et al., 2010b). The Intellectuals are also anticipating the beneficial effects of provision of credit and insurance products (Karlán and Morduch, 2010 and Banerjee et al., 2010; Roodman, 2012).

### Meaning and Definition of BPL Families

As per Atta Dal Scheme, 2007 estimates, Punjab has total of 43, 48, 580 families and 11.45 per cent BPL families 4, 98,089 BPL families. As per Tendulkar methodology, Punjab has 15 per cent of BPL families (Poverty estimates 2011-12). Ludhiana district has minimum BPL card holders i.e. eight per cent and Faridkot district has maximum BPL card holders' i.e. 29 per cent (District Level Household and Facility Survey, 2007-08).

As per guidelines issued for BPL survey 2002-07, the BPL household is defined on the basis of income. In 2005-06 the poverty line for the state was Rs. 415 per month per head and Rs. 493 per month per head in rural and urban areas respectively. It was Rs. 30,129 and Rs. 31,473 annually per family for rural and urban areas respectively (Punjab Planning Commission). Punjab has 15 per cent of households who have BPL (below poverty line) cards. Faridkot district has maximum BPL card holders' i.e 29 per cent whereas Ludhiana district has minimum BPL card holders' i.e. eight per cent (District Level Household and Facility Survey, 2007-08). The BPL families were examined in the present study as these are the most neglected sections as far as financial access is concerned. Following table shows the district-wise BPL population of Punjab.

**Table 1.1 BPL Population of Punjab**

| SrNo | District | No of BPL | Sr. No | District | No of BPL |
|------|----------|-----------|--------|----------|-----------|
|------|----------|-----------|--------|----------|-----------|

|     |                 |          |     |            |          |
|-----|-----------------|----------|-----|------------|----------|
|     |                 | families |     |            | families |
| 1.  | Amritsar        | 50679    | 12. | Faridkot   | 17865    |
| 2.  | Bathinda        | 23884    | 13. | Pathankot  | NA       |
| 3.  | Barnala         | 5129     | 14. | Gurdaspur  | 34341    |
| 4.  | Jalandhar       | 71801    | 15. | Rupnagar   | 11407    |
| 5.  | Ferozepur       | 53407    | 16. | SAS Nagar  | 2805     |
| 6.  | Ludhiana        | 31351    | 17. | Sangrur    | 53246    |
| 7.  | Hoshiarpur      | 23082    | 18. | Patiala    | 41427    |
| 8.  | Moga            | 18860    | 19. | Mukatsar   | 16848    |
| 9.  | Fatehgarh Sahib | 14815    | 20. | Mansa      | 15715    |
| 10. | Kapurthala      | 4289     | 21. | Tarn Taran | 4120     |
| 11. | SBS Nagar       | 3018     | 22. | Fazilika   | NA       |
|     | Total           |          |     |            | 498089   |

**Source: Department of Food and Civil Supplies and consumer affairs, Punjab (Survey, 2002-07)**

### **1.3 Review of Literature**

**Adongo and Deen-Swarray (2006)** investigated the impact of access to financial services on poverty alleviation strategies among the rural population in Namibia. A Censored Regression Model was applied to financial service usage by household heads in Namibia using the monthly income for each head of a household as a proxy for poverty. The study stated a policy implication that improved access to financial services can contribute to poverty alleviation among the poor in rural Namibia. **Bhandari (2009)**

investigated financial inclusion in terms of growth in bank accounts of Scheduled Commercial Banks and the trends in below poverty line population. The time period of the study was 1980 – 2007. The Spearman's Rank Correlation method was applied for comparisons. The result established that growth of bank accounts owned by individuals were at worst during the reform period. The study further elaborated its findings that the negative relationship between bank accounts and poverty was found true in urban areas of Jammu & Kashmir, Andhra Pradesh, Orissa, Madhya Pradesh and Rajasthan. **Ayyagari, Beck and Hosein (2013)** explored the effects of financial deepening and outreach on rural poverty. It also examined the channels through which poverty was impacted. The results revealed a strong negative relationship between financial deepening and rural poverty. The study outlined entrepreneurship and inter-State migration as the channels through which poverty was reduced. **Casadas (2015)** attempted to assess the effects of mobiles on poverty using a cross-country quantitative approach. The sample of the study was 40 sub-Saharan countries with time period 1990-2014. A panel data model and pooled effects model approach. The results revealed a positive association with the financial access and financial intermediation. The findings confirmed a positive impact of a better financial intermediation against poverty. **Rewilak (2017)** investigated whether financial developments resulted in poverty reduction. The study was based on cross section data from 2004 -2015. The results revealed that both financial deepening and greater financial access reduced the number of people living below poverty line. The findings indicated that financial instability and banking sector inefficiency had shown no effects on poverty reduction. **Schmied and Marr (2017)** explored the impact of financial inclusion measures on poverty reduction in Peru using a Random and Fixed effects Model. The results established that financial inclusion had an impact on poverty though coefficients were too small. The study advised developing countries to provide a wide range of products and services to broaden access for poor and underserved sections. **Bakari, Idi and Ibrahim (2018)** examined the impact of financial inclusion on poverty reduction in 49 Sub-Saharan African countries using data spanning the period of 1980-2017. Regression, Chi-square and Langrage Multiplier Test was applied. The findings established that mobile banking, commercial bank branches, political stability, interest

rate and inflation had shown a positive impact on financial inclusion in Africa. **Wang and He (2020)** attempted to examine the effects of digital financial inclusion with the help of Ordinary Least Square technique on farmers' vulnerability to poverty in China. The results established that farmer's use of digital finance had positive impact on their vulnerability.

**Research Gap:** There is paucity of empirically tested relation between financial inclusion and poverty in the previous studies. Most of the studies concentrated on the supply side of Financial Inclusion and financial services. In this study, an attempt has been made to focus on the demand side of financial inclusion.

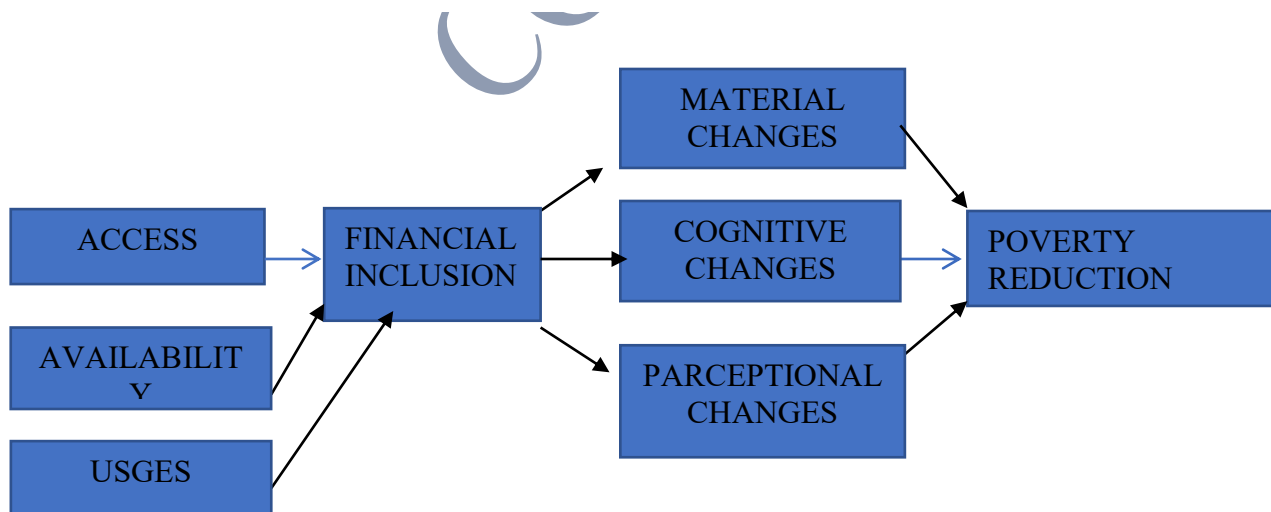
### **Financial Inclusion from demand side of financial services**

- **Access:** As far as access is concerned mostly it is in terms of geography and physical access. There are numerous barriers in the way of accessing and using formal financial services. It prevents small firms and households from using formal financial services. It leads to geographical exclusion because of inaccessibility; distances and lack of proper infrastructure (Ravi, 2019). There are some services which can be availed via phone or internet facility. Hence digital financial services can be viewed as a great medium to broaden financial outreach.
- **Availability:** It refers to the provision of suitable products and services. It is actually one step ahead of access. Here problem such as documentation and unsuitability of products mostly distract users from formal to informal financial system.
- **Usage:** Easy access and suitable availability lead to regular use of financial services. Usage refers to the frequency and regularity of transactions.
- **Impact:** It refers to the study of welfare implications for the intended users. It can be examined by focusing on demand side surveys conducted to trace the changes in the level of income, consumption, assets, cognitive and perceptual changes for the beneficiaries.

In the light of above facts, it can be inferred that access to a transaction account is a first step toward mainstreaming excluded sections. It enables the people to store money and receive payments. A transaction account serves as a gateway to other financial services. The focus of the World Bank Group's Universal Financial Access 2020 initiative is to ensure access to all. Great strides have been taken toward financial inclusion and 1.2 billion adults globally have access to an account since 2011. Today, 69 per cent of adults have an account. Further, strategies have been framed for moving from access to account; to account usage for the countries where almost 80 per cent or more of the population have accounts (China, Kenya, India, and Thailand). These nations pinned their hopes in reforms, private sector innovation, and a jolt to open low-cost accounts, including mobile and digitally-supported payments

- **Financial literacy:** Financial knowledge plays a crucial role in financial inclusion. For mainstreaming the underprivileged sections, finance is an important tool, but illiterate masses cannot manage money for productive purposes which further led to poverty traps. Unregulated access to financial services, especially to that of credit, has the possibility to further impoverish the poor.

**Figure 1.1 Conceptual Framework of the Study**



### Objectives

1. To examine financial inclusion for BPL families in Punjab

2. To examine impact of financial inclusion on poverty of BPL families of Punjab

### **Hypothesis**

- **H<sub>0</sub>:** There is no significant impact of financial inclusion initiatives on the poverty of the beneficiaries
- **H<sub>1</sub>:** There is significant impact of financial inclusion initiatives on the poverty of the beneficiaries

### **Scope of the Study**

The study evaluated the impact of financial inclusion on beneficiaries of selected districts of Punjab whose accounts were opened under financial inclusion drive after 2007. The Study covered three districts namely Jalandhar, Sangrur and Gurdaspur of Punjab.

### **Research Methodology**

#### **Sampling Plan**

1. The BPL beneficiaries whose no-frill accounts have been opened under the financial inclusion drive of RBI.
2. In order to know the impact and the beneficiaries who have availed services like loan, overdraft, General Purpose Credit Card (GCC), Kisan Credit Card (KCC) and micro-insurance are examined.

**Sample Size:** For determining the sample size, Krejcie and Morgan (1970), table for sample size for finite population is used. By using the formula for a finite population, the calculated sample size is 384. But in order to capture the heterogeneity of population, sample size is raised to 500 beneficiaries. The respondents for the study are male or female head of the BPL households or next available adult member of the family.

#### **Data Collection**

**Primary Data:** Primary data is collected using an adapted questionnaire. A total of 500 respondents are examined from selected villages of chosen districts of Punjab.

**Secondary sources:** Reports of Punjab Planning Board, State Level Bankers' Committee (SLBC) Punjab and Rural Development Agencies, Books, Journals, and Reports of Financial Institutions have been referred to build up the framework of the study.

### **Impact of Financial Inclusion Services on Poverty of the Participants**

**H<sub>0</sub>:** There is no significant impact of financial Inclusion initiatives on the poverty of the beneficiaries in the selected districts.

#### **Headcount Index**

The Headcount Index is simply the per centage of the population that falls below the official poverty line. This is a most common measure of poverty which evaluates a country's poverty level using the number or prevalence of poor persons in the country. Yet as emphasized by Sen (1976), headcount measures have serious limitations stemming from their inability to differentiate among the poor. Large changes in poor incomes are ignored when the incomes stay below the poverty line, while small changes near the line can disproportionately affect measured poverty. Head count measures the proportion of population which is poor or below poverty line calculated by comparing a minimum level of income often denoted by  $P_0$

$$P_0 = N_P / N$$

Where  $N_P$  is the number of poor and  $N$  is total selected sample or population. If 60 people are poor in a sample of 300 then

$$P_0 = 60/300 = 0.2 = 20 \%$$

#### **Poverty Gap Index**

The poverty gap reflects the intensity of poverty in a nation, showing the average shortfall of the total population from the poverty line. This index shows how much money should be transferred to the poor in order to lift them out of poverty. The poverty gap index is calculated as the mean aggregate income shortfall relative to the poverty line across the population and dividing the total by population. Non-poor BPL families are considered having zero shortfall. However, the poverty gap index does not take into account differences in the severity of poverty amongst the poor, and therefore tends to

omit inequality among the poor. Poverty gap index might complement the headcount index, but might not be sufficient in order to fully capture the incidence of poverty in a country.

The poverty gap ( $G_i$ ) can be defined as the poverty line ( $z$ ) less actual income ( $y_i$ ) for poor individuals; the gap is considered to be zero for everyone else. Using the index function,

$$G_i = (z - y_i) \text{ if } y_i < z$$

### Squared Poverty Gap (Poverty Severity) Index

The squared poverty gap index is used to measure the severity of poverty that i.e., the degree of inequality among the poor themselves. This index is a weighted sum of poverty gaps (as a proportion of the poverty line), where the weights are the proportionate poverty gaps themselves. The need for this index arises because the poverty gap index may not adequately capture concerns over distribution changes within the poor.

$$P_2 = \frac{1}{N} \sum_{i=1}^n \frac{G_i^2}{z}$$

**Poverty Line Definition:** For the year 2011-12, for country territories the national poverty line utilizing the Tendulkar Technique is assessed at Rs. 816 per capita per month in rural areas and Rs. 1,000 per capita per month in urban and semi-urban territories. For a group of five, the all-India destitution line was fixed at consumption expenditure of Rs. 4,080 every month in rustic territories and Rs. 5,000 every month in urban territories.

**Table 1.2 Poverty Line as per Number of Family Members**

| No of Members | Rural (@Rs. 816) | Semi-urban (@1000) |
|---------------|------------------|--------------------|
| 03            | 2448             | 3000               |
| 04            | 3264             | 4000               |
| 05            | 4080             | 5000               |
| 06            | 4896             | 6000               |
| 07            | 5712             | 7000               |

|    |      |      |
|----|------|------|
| 08 | 6528 | 8000 |
|----|------|------|

**Source: Planning Commission Report, 2011-12**

The table 1.2 is depicts poverty line as per Planning Commission Report 2011-12. Here poverty line is calculated on the basis of number of family members multiplied with consumption expenditure per capita on monthly basis.

**Table 1.3 Number of BPL Households based on HCI**

|                      | Before Availing<br>Financial Services | After Availing<br>Financial Services | % age change |
|----------------------|---------------------------------------|--------------------------------------|--------------|
| Dhariwal (Gurdaspur) | 14                                    | 12                                   | 14           |
| Kaler Kalan          | 2                                     | 2                                    | -            |
| Sangrur              | 12                                    | 10                                   | 16.67        |
| Jalandhar            | 23                                    | 19                                   | 17.39        |
| Total                | 51                                    | 43                                   | 15.68        |

**Source: Compiled from survey data**

**Table 1.4 Number of BPL Households Based on Value of Poverty Gap and Poverty Gap Index**

| Districts               | Poverty Gap |       | Poverty Gap index |        | Difference |
|-------------------------|-------------|-------|-------------------|--------|------------|
|                         | Before      | After | Before            | After  |            |
| Dhariwal<br>(Gurdaspur) | 5400        | 4200  | 0.011             | 0.009  | 0.002      |
| Kaler Kalan             | 792         | 792   | 0.009             | 0.009  | No change  |
| Sangrur                 | 11380       | 9456  | 0.0125            | 0.0083 | 0.0042     |
| Jalandhar               | 11736       | 9720  | 0.0097            | 0.0068 | 0.0029     |

|       |       |       |        |        |        |
|-------|-------|-------|--------|--------|--------|
|       |       |       |        |        |        |
| Total | 29308 | 24484 | 0.0422 | 0.0331 | 0.0091 |

**Source: Compiled from survey data**

### **Findings**

The study revealed that poverty line has not been revised since 2011-12. As a result, a very small number of respondents have been found below the poverty line. In absolute terms, 51 households have been found below poverty line. After availing financial services, only 08 households crossed the threshold of poverty line and 43 persons have been found below poverty line. In relative terms, 15.68 per cent improvement has been recorded in the value of Head Count Index of below poverty line.

Poverty Gaps and Poverty Gap Index are calculated for BPL families of Punjab. Head Count Index only takes into account the number of poor, not how much poor they are or depth of poverty. Poverty gap has been utilized to get the extent of poverty. Gurdaspur district is categorized in two areas i.e. Dhariwal, a semi-urban area and Kaler Kalan, a rural territory. The study revealed that Poverty Gap and Poverty gap index have declined over the period of time after availing financial inclusion services. It implied that financial inclusion services have played positive role. These measures have resulted in reduction of poverty. The reduction has occurred by 0.002 points in Dhariwal (Gurdaspur), by 0.0042 in Sangrur and by 0.0029 in Jalandhar. For Punjab as a whole, the Index has shown a decline by .0091 points.

### **Conclusion**

The study revealed that impact on poverty is very low in the selected districts. Though value of Head Count Index, Poverty Gap and Poverty Gap Index has declined over the period of time but this change is recorded for a few respondents. Poverty gap index has declined over the period of time. It implied that financial inclusion services have resulted in reduction of poverty. The reduction has occurred by 0.002 points in

Dhariwal (Gurdaspur), by 0.0042 in Sangrur and by 0.0029 in Jalandhar. The Index has shown a decline by .0091 points for whole of the Punjab.

**Policy Implication:** The study strongly recommends that authorities should carry out the drive for financial inclusion more vigorously along with addressing the ground level problems. Authorities must provide a wide range of products and services to the BPL families. The need of hour is to broaden the access for poor and BPL families so that they are not deprived of the facilities for financial inclusion.

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