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# Assessing Financial Inclusion Impact on Economic Empowerment in Pondicherry: A Study on Banking Scheme Beneficiaries

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***Authors' contributions***

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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## ABSTRACT

The Indian banking industry today is quite robust and strong to be able to take on the challenges of achieving greater financial inclusion. Access to affordable financial services, such as credit and insurance enlarges livelihood opportunities and empowers the poor to take care of their lives. These empowerment aids will create social and political stability. Customers who are account holders in Indian bank under financial inclusion scheme in Pondicherry formed the population of the study. The bank stated that thousands of customers were covered under this scheme. Since the study focus only on individual account holders, of financial inclusion. List of individual account holders was obtained from the bank case firm. Majority (60 per cent) of the respondents' income

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was in the range of around Rs. 3,000 – 5, 000 per month. 64 per cent of sample respondents were living in the concrete roofed houses. About 37 per cent of respondents were visiting the bank once in a month followed 33 per cent visits as and when it requires. The economic empowerment index revealed that there was no significant improvement in the savings pattern, increase in income and housing condition and it was found that there was slow and insignificant level of economic empowerment taking place among the socially disadvantageous people even after the financial inclusion under NPPFI scheme implemented by banks. It could be concluded that the scheme had not brought any significant change in the life style and economic status of the people who are supposed to be its beneficiaries.

*Keywords: Financial inclusion; empowerment; banking; financial services.*

## 1. INTRODUCTION

Bank nationalization in India marked a paradigm shift in the focus of banking as it was intended to shift the focus from class banking to mass banking. The banking industry has shown tremendous growth in volume and complexity during the last few decades. Despite making significant improvements in all the areas relating to financial viability, profitability and competitiveness, there are concerns that banks have not been able to include vast segment of the population, especially the underprivileged sections of the society, into the fold of basic banking services [1].

The Indian economy is growing at a steady rate of 8.5 per cent to 9.0 per cent in the last five years or so. Most of the growth is from industry and services sector. Agriculture is growing at a little over two per cent. The potential for growth in the primary and small and medium enterprise sector is enormous [2]. Limited access to affordable financial services such as savings, loan, remittance and insurance services by the vast majority of the population in the rural areas and unorganized sector is believed to be acting as a constraint to the growth impetus in these sectors [3,4].

Access to affordable financial services, such as credit and insurance enlarges livelihood opportunities and empowers the poor to take care of their lives. These empowerment aids will create social and political stability. The Indian banking industry today is quite robust and strong to be able to take on the challenges of achieving greater financial inclusion [1,5].

Thorat [6] defined financial exclusion is a concept related to a lack of access to a range of financial services or a narrow concept reflecting particular circumstances such as geographical exclusion, exclusion on the grounds due to high charges and prices or exclusion from marketing efforts. Financial exclusion is the lack of access by certain consumers to appropriate, low cost, fair and safe financial products and services from mainstream providers. Leeladhar [7] defined financial inclusion is delivery of banking services at an affordable cost to the vast section of disadvantaged and low income groups. Unrestrained access to public goods and services is of an open and efficient society. Banking services are in the nature of public good, it is essential that availability of banking and payment services to the entire population without discrimination.

Shyamala [8], indicated that in her study “Inclusive Growth: Role of Financial Education” was of the opinion that the concept of financial education could ideally be stretched to cover economic education as well. At a broader societal level, given the path of economic reforms India has embraced since the early nineties, and the ensuing debates, it is imperative that the society and general populace be objectively informed about the fundamental economic issues and the rationale for, at-times difficult, choices to be made in this regard. This could go a long way in creating an informed and harmonious democracy. Aggarwal & Klapper [9] examines regulatory measures that were put in place to remove the physical, bureaucratic, financial, and trust barriers to the use of formal accounts. It also analyzes some typical reasons why people do not have a formal account. Allen et al., [10] discovered that, compared to other regions, population density has a far greater impact on financial inclusion and development in Africa. Lastly, we present data demonstrating how mobile banking, a recent development in financial services, has aided in resolving infrastructure issues and enhancing financial accessibility. In order to present financial literacy as a moderator of the relationship between access to finance and company growth, the study by Adamoko [11] leans on the resource-based view. Bongomin et al., [12] presented the results of a study on the mediating role of social networks in the relationship between financial inclusion and institutional framework in rural Uganda. Ali [13] investigated the empowerment of women through financial inclusion. Mudimigh & Anshari [14] emphasizes FinTech's definition and significance to the financial ecosystem, particularly in Southeast Asia. It focuses on the history of financial technology, or FinTech, and how transactions changed over time from largely utilizing cash to credit cards to cashless transactions.

## 2. DATA AND METHODOLOGY

Customers who are account holders in Indian bank under financial inclusion scheme in Pondicherry formed the population of the study. The bank stated that thousands of customers were covered under this scheme. Since the study focus only on individual account holders, of financial inclusion. List of individual account holders was obtained from the bank case firm. From which a total of 100 are selected 50 from urban branch of Kamaraj salai, covering the regions of Indira Gandhi nagar, Sanjay Gandhi nagar, Rajiv Gandhi nagar and 50 from rural branch of Kariamanikam covering regions of Kariamanikam, Erippakam, Madukkarai and Netapakkam,these regions where purposefully chosen as these region consist the maximum number of financially disadvantaged people.

### 2.1 Tools of Analysis

The collected data were analyzed with reference to the objectives set forth in the study. Tools of analysis used for the purpose are explained.

### 2.2 Percentage Analysis

Percentage analysis was carried out to analyze the general characteristics, such as age, educational status, occupation, family type, family members, earning members in the family, income of the family etc.,

### 2.3 Economic Empowerment Index

The role of financial inclusion in terms of empowering the individuals was analyzed in terms of its role in improving the individual's access to Savings, assets and income. For this purpose, data on various economic aspects such as income, savings, etc were used to calculate the economic empowerment index by using the economic parameters as shown below.

The index of economic indicators (Eh)

$$Eh = \sum Ej / \sum Ej\ (max)$$

Where,

Ej represents $j^{th}$ economic indicator,
Ej (max) represents maximum scores of $j^{th}$ economic indicator can take.

This index helps in identification of the economic factors which are the economic indicators and different indicators are classified into various classes and a score is given to each of the factors and finally the indicators like increase in income, increase in savings, house type are summed and divided by their maximum mean to arrive the index and maximum index value is interpreted to be the highly empowered.

Economic empowerment index is useful to assess the economic impact / indicators of empowerment due to the concept of financial inclusion on the individuals.

## 3. RESULTS AND DISCUSSION

### 3.1 General Characteristics of Sample Respondents

Knowledge of the basic characteristics of the respondents would help in understanding their perception over financial inclusion facilities.

### 3.2 Age of Respondents

It could be inferred that 34 per cent of the sample respondents belonged to the age group of 35-45 years, followed by 28 per cent in the age group of 25-35 years, 17 per cent were in the age group of 45-55 years, 15 per cent were in the age group of less than 25 years and the least of six percent of respondents were in the age category of above 55 years (Table 1).

### 3.3 Educational Status of the Respondents

Educational status of the sample respondents may influence them towards the National pilot project for financial inclusion scheme. The selected respondents were categorized into five groups namely; the illiterate, primary level, secondary school level, higher secondary level and graduate. About 43 per cent of the sample respondents were educated upto middle school, followed by primary school level contributing 42 per cent respectively, which is again followed by about 12 per cent of respondents who were illiterate. Only, two per cent of respondents had high school education and one per cent had diploma qualification respectively (Table 2).

## 3.4 Occupation of the Respondents

National pilot project for financial inclusion is aimed to improve the livelihood of disadvantaged people through helping them in their financial needs, the major occupation of the sample respondents were farmers, construction workers, street vendors, shopkeepers and others include various other job done by the financially disadvantaged. 25 per cent of the respondents were farmers and same per cent of them were in unorganized sector as labourers, construction workers, street vendors, and shop keepers constituted about 21 per cent, 16 per cent and 13 per cent respectively (Table 3).

## 3.5 Monthly Income of the Family

The details on monthly family income of the respondents are most important, as it reflects the financial status of the person and his family. It was found that 60 per cent of the respondents belonged to income group between Rs.3000 and Rs.5000, followed by 30 per cent of the respondents in the income group of below Rs. 3000, nine per cent of sample respondents income was ranging from of Rs.5000 and Rs.7000 and one per cent were in the income group above Rs.10000 (Table 4).

**Table 1. Age group of the respondents**

| Age-group | Number of respondents | Percentage |
|---|---|---|
| Below 25 | 15 | 15.00 |
| 25-35 | 28 | 28.00 |
| 35-45 | 34 | 34.00 |
| 45-55 | 17 | 17.00 |
| Above 55 | 6 | 6.00 |
| Total | 100 | 100.00 |

**Table 2. Educational status of the sample respondents**

| Education | Number of respondents | Percentage |
|---|---|---|
| Illiterate | 12 | 12.00 |
| Primary education | 42 | 42.00 |
| Middle school | 43 | 43.00 |
| High school | 2 | 2.00 |
| Diploma/Degree | 1 | 1.00 |
| Total | 100 | 100.00 |

**Table 3. Occupational status of sample respondents**

| Occupation | Number of respondents | Percentage |
|---|---|---|
| Farmer | 25 | 25.00 |
| Construction worker | 21 | 21.00 |
| Street vendors | 16 | 16.00 |
| Shopkeepers | 13 | 13.00 |
| Others | 25 | 25.00 |
| Total | 100 | 100.00 |

**Table 4. Monthly Income of the respondents**

| Monthly Income | Number of respondents | Percentage |
|---|---|---|
| Below 3000 | 30 | 30.00 |
| 3000-5000 | 60 | 60.00 |
| 5001-7000 | 9 | 9.00 |
| 7001-10000 | 1 | 1.00 |
| Total | 100 | 100.00 |

### 3.6 Type of the House of the Sample Respondents

A person's financial status and lifestyle can be assessed by his shelter. The people who are financially disadvantaged live in thatched, partially thatched or tilled roofed houses. Considering the housing developing projects of Pondicherry government, concrete houses are included in this category. It was found that 64 per cent of sample respondents were living in concrete roofed houses followed by 20 per cent of respondents in tilled roof houses and the rest of 16 per cent living in partially thatched houses (Table 5).

### 3.7 Frequency of the Visits to the Bank

The characteristic of saving and usage of bank scheme can be accessed by analyzing the frequency of respondents visit to the bank (Table 6).

It could be inferred that 37 per cent of respondents were visiting the bank once in a month followed by 33 per cent visit whenever required respectively. 20 per cent of sample respondent's visits once in fortnight and remaining 10 per cent of the respondents visit the bank every week.

### 3.8 Source of Information about Financial Inclusion

Different sources of information were available for the respondents to learn about the products. Among the sample respondents 34 per cent of them came to know about financial inclusion through bank staffs, followed by 29 per cent of respondents from friends and neighbors, 24 per cent through extension workers respectively. Only nine per cent had the information through relations and remaining four per cent of the respondents came to know from village leaders (Table 7).

### 3.9 Source of Awareness which Influenced to Join the Scheme

During the implementation of NPPFI many worked as extension agent to make people aware about NPPFI .These extension agents played a vital role in influencing the respondents to join the scheme. Bank officials and NGO members, influenced the beneficiaries by 48 per cent and 39 per cent respectively .The village SHG members were influential among 18 per cent of the respondents (Table 8).

### 3.10 Relationship between Awareness on Financial Inclusion and Demographic Factors

The data on awareness towards financial inclusion by the individual and demographic factors affecting it were collected and analyzed. It could be observed that when all the six variables considered together the co-efficient of determination was 0.3985. It means that all the six variables would bring the awareness of financial inclusion as 39.85 per cent, keeping all the other variables constant. In this case, among the independent variable such as age, educational status, marital status, gender, occupational status and monthly income, among the above factors income and education contributed more towards awareness on financial inclusion (Table 9).

### 3.11 Economic Empowerment Indices

The empowerment indices were 2.21 and it was well below the desired value of high empowerment. This shows that the introduction of financial inclusion had not brought any significant change in the target people living condition, either through income increase (or) savings (or) housing condition. (3.5 above -highly empowered, 2.5-3.5-moderately empowered, less than 2.5-less empowered or not empowered) (Table 10).

**Table 5. Type of the house of the respondents**

| Type | Number of respondents | Percentage |
|---|---|---|
| Fully thatched | 0 | 0 |
| Partially thatched | 16 | 16.00 |
| Tilled roof | 20 | 20.00 |
| Concrete roof | 64 | 64.00 |
| Total | 100 | 100.00 |

**Table 6. Frequency of respondents visit to bank**

| S.No | Frequency | Number of Respondents | Percentage |
|---|---|---|---|
| 1 | Once in week | 10 | 10.00 |
| 2 | Once in month | 37 | 37.00 |
| 3 | Fortnightly | 20 | 20.00 |
| 4 | Whenever required | 33 | 33.00 |
| | Total | 100 | 100.00 |

**Table 7. Source of information about financial inclusion**

| Particulars | Number of Respondents | Percentage |
|---|---|---|
| Bank staff | 34 | 34.00 |
| Extension worker | 24 | 24.00 |
| Friends & neighbours | 29 | 29.00 |
| Relations | 9 | 9.00 |
| Radio | 0 | 0.00 |
| News paper | 0 | 0.00 |
| Village leaders | 4 | 4.00 |
| Total | 100 | 100.00 |

**Table 8. Contribution of different extension agents on NPPFI**

| S No | Particulars | Number of respondents | Percentage to Total |
|---|---|---|---|
| 1 | Bank officials | 42 | 42.00 |
| 2 | NGO members | 32 | 32.00 |
| 3 | SHG members | 18 | 18.00 |
| | | 92 | 92.00 |

**Table 9. Awareness and factors influencing on financial inclusion**

| S.No. | *Attributes* | Co-Efficient | t-values |
|---|---|---|---|
| 1 | Age | 0.003069 | 0.803727 |
| 2 | Gender | 0.030763 | 0.301921 |
| 3 | Status | 0.044094 | 0.366767 |
| 4 | Occupation | -0.02179 | -0.66687 |
| 5 | Income | 7.88E-05 | 2.467052** |
| 6 | Education | 0.09757 | 7.189149*** |

*($R^2$ =0.3985), *** -significant at 1 percent level; **-significant at 5 percent level*

**Table 10. Scores assigned to different economic indicators for a composite index**

| S.No | Economic indicators | Score values | | | |
|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 |
| 1 | Increase in income | >100 | 100-500 | 500-1000 | <1000 |
| 2 | Increase in savings | >100 | 100-500 | 500-1000 | <1000 |
| 3 | House type | 1 (Fully thatched) | 2 (Partially thatched) | 3 (Tilled roof) | 4 (Concrete roofed) |

## 4. CONCLUSION

About 34 per cent respondents were in the age group of 35-45 years, followed by 28 per cent from the age group of 25-35 years. Among the total respondents, 43 per cent were educated up to middle school, followed by primary school level contributing 42 per cent respectively. Regarding occupation composition of the respondents was equally shared by farmers and labourers by 25 per cent each. Majority (60 per cent) of the respondents' income was in the range of around Rs. 3,000 – 5, 000 per month. 64 per cent of sample respondents were living in the concrete roofed houses. About 37 per cent of respondents were visiting the bank once in a month followed

33 per cent visits as and when it requires. The economic empowerment index revealed that there was no significant improvement in the savings pattern, increase in income and housing condition and it was found that there was slow and insignificant level of economic empowerment taking place among the socially disadvantageous people even after the financial inclusion under NPPFI scheme implemented by banks. It could be concluded that the scheme had not brought any significant change in the life style and economic status of the people who are supposed to be its beneficiaries.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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