

# Information and Communication Technology (ICT) Infrastructure and Financial Inclusion in India

Ujjal Sut



**Abstract:** *ICT (Information and Communication Technology) is the mostly discussed and observed subject matter now a days. In the all round progress of an economy, this sector has a key role to play. An economy cannot thrive well with proper information and communication technology. In driving the development of financial inclusion and sustainable development the role played by information and communication technology, cannot be overlooked. This infrastructure plays a crucial role, enhancing the technical progress and thereby total productivity of the economy. Moreover previous findings have also showed a positive correlation of ICT on economic growth. This paper studies the role of ICT by using a multiple regression analysis. We have used mainly secondary data to arrive a logical conclusion. It is expected that this paper will help the policy makers and the researchers in analyzing and understanding the importance of financial inclusiveness for economic development.*

**Key Words :** *Communication, Economy, Sustainable Inclusion.*

## I. INTRODUCTION

ICT stands for information and communication technology. It is the extended term of information and technology. ICT emphasizes the role of umbrella communications and the integration of telecommunication that enable the users to access and manipulate, transmit arrays of data. Role of ICT in the modern digital era inevitable. This paper also gives a broad outlook of the role of financial inclusion in the progress of an economy. Technological advancement is one of the key driver behind economic growth and employment generation. Growing importance of information and technology during the last few decades has encouraged the researchers to explore its contribution towards increasing productivity, rapid economic development, reducing of poverty etc. This sector has gained much importance globally.

### 1. OBJECTIVES OF THE STUDY

1. To study the importance of ICT for economic development.
2. To study the importance of financial inclusion for economic development.
3. To analyze the significance of ICT for financial inclusion of India.

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\* Correspondence Author

Ujjal Sut\*, Assistant Professor, Department of Economics, Darrang College, Tezpur, Assam.

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## II. RESEARCH METHODOLOGY

The present study has used multiple regression analysis in assessing the status of financial inclusion of our country. For this, one important parameter of financial inclusion, that is total no of bank accounts has been selected. The data collected were mainly secondary in nature. Various journals, website of the Government of India, website of RBI, periodicals have been used to arrive at a logical conclusion. Data collected from the mentioned sources were analyzed with the help of multiple regression.

## III. RESULTS AND DISCUSSION

**Table 1: Number of landline and mobile subscribers**

| SL. No                            | YEAR | Number of mobile users | No of landline users |
|-----------------------------------|------|------------------------|----------------------|
| 1                                 | 2010 | 584.2                  | 36.96                |
| 2                                 | 2011 | 811.6                  | 34.73                |
| 3                                 | 2012 | 919.18                 | 32.17                |
| 4                                 | 2013 | 867.81                 | 30.21                |
| 5                                 | 2014 | 904.52                 | 28.50                |
| 6                                 | 2015 | 969.54                 | 26.59                |
| 7                                 | 2016 | 1034.11                | 25.22                |
| 8                                 | 2017 | 1170.59                | 24.40                |
| 9                                 | 2018 | 1188.99                | 22.81                |
| <b>Coefficient of Correlation</b> |      |                        | <b>-0.93</b>         |

Source: RBI Website

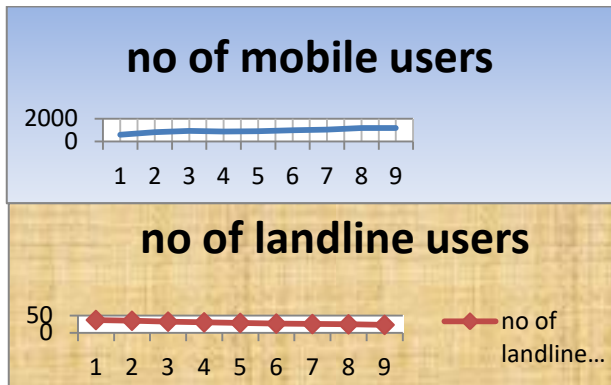


Fig 1: Graph lines showing number of mobile users and number of landline users.

Source: RBI

From the table and the figure we have seen that the number of landline users have been decreasing from 2010. A downward sloping line has been observed for the landline users. On the opposite a rising trend is observed for the number of mobile users. A correlation coefficient of  $-0.93$  has been found for these two arrays of data. It indicates a strong negative relationship between them.

Table 2. Number of internet subscribers ( Millions)

| Year | No of internet subscribers |
|------|----------------------------|
| 2010 | 61.2                       |
| 2011 | 72.5                       |
| 2012 | 84.3                       |
| 2013 | 112.3                      |
| 2014 | 251.59                     |
| 2015 | 302.36                     |
| 2016 | 342.65                     |
| 2017 | 422.20                     |
| 2018 | 493.96                     |

Source: RBI

From the above table it can be concluded that the number of internet subscribers in India is increasing day by day. In the year 2010 the number of internet subscribers was 61.2 million and in the year 2018 it increased to 493.96 million.

Table 3. Number of ATM card holders

| Year | No of ATM card users |
|------|----------------------|
| 2010 | 39115                |

|      |        |
|------|--------|
| 2011 | 42275  |
| 2012 | 50672  |
| 2013 | 63225  |
| 2014 | 71690  |
| 2015 | 97793  |
| 2016 | 107758 |
| 2017 | 109908 |
| 2018 | 106412 |

Source: RBI

The above table reveals that the total number of ATM card holders for all the banks in India increased from 39115 in 2010 to 106412 in 2018. Since now a days every bank account is linked with ATM card , therefore increasing the no of ATM card holders notably ensures the status of financial inclusion.

Table 4. Multiple linear regressions:

| SUMMARY OUTPUT        |         |
|-----------------------|---------|
| REGRESSION STATISTICS |         |
| MULTIPLE R            | .953127 |
| R SQUARE              | .908451 |
| ADJUSTED R SQUARE     | .877935 |
| STANDARD ERROR        | 1024.31 |
| OBSERVATIONS          | 9       |

From the summary report multiple R has been found as  $.9531$  . It is nothing but the coefficient of correlation. It describes a strong positive correlation among the dependent variable ( No of ATM card holders ) and two independent variables ( number of internet subscribers and the no of mobile subscribers ).We got R square as  $.90$ . It is the coefficient of determination. It can be interpreted that 90 percent variation in the dependent variable is explained by the independent variables.

#### IV. CONCLUSION

From the above discussion we may come to conclusion that the financial inclusion of an economy is ensured by the number of internet users and the number of mobile users.



Multiple regression analysis has shown the linear dependency of the mentioned variables. Governments , Non Governmental Organizations (NGOs) , Banks , Non banking financial institutions should actively take part to bring awareness among the common people regarding financial inclusion. Union Governments ,State Governments and local Governments have a key role to make people digitally literate which can boost up the process of inclusiveness in financial terms.

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## AUTHORS PROFILE



My name is Ujjal Sut. I grew up in Assam , India. I did my Bachelor of Science in 2016 and Master of Arts ( MA) in Economics from the University of Science and Technology , Meghalaya in 2018. Currently I am working as an assistant professor in the Department of Economics , Darrang College, Tezpur , Assam.