# Developing a Financial Inclusion Index (FII) Model through MGNREG Scheme in Virudhunagr District

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Abstract-Mahatma Gandhi **National** Rural Employment Guarantee (MGNREG) scheme is a central government employment scheme to provide 100 days wage employment to rural people. In India rural people are mainly depend on the local money lenders for their financial needs and one segment of population enjoying all financial services and other portion of population especially in rural population is not able to obtain basic financial services i.e Bank account. To overcome these issue Government of India taken initiative to transfer of MGNREG scheme wage that mandatory transfer through beneficiaries bank and post office account which keeping in the mind of financial inclusion. Financial inclusion is the process of including financially excluded people. Financial inclusion index is a most important instrument for measuring level of financial inclusion in particular region. For construing financial inclusion index through MGNREG scheme the researcher used threedimensional data namely, Availability of banking services (d1), Banking penetration (d2), banking disbursement (d3). The present study an attempt to develop a model for Financial Inclusion Index through MGNREG scheme in virudhunagar district.

### INTRODUCTION

Financial inclusion is the delivery of financial services to all the people in a fair, transparent and equitable manner at an affordable cost. Financial inclusion has the potential to improve the standard of living of the poor and the disadvantaged people. It is essential to make available the basic banking services to the entire population without any discrimination. In order to increase the number the Reserve Bank of

India and the Government of India take various innovative steps. Financial inclusion mainly focuses on the poor who do not have formal financial institutional support and getting them out of the clutches of local money lenders. In this point of view MGNREGA is more successful one. Financial Inclusion is one of the desirable goals of the Mahatma Gandhi National Rural Employment Guarantee Act, 2005(MGNREGA), which provides 100 days of wage employment in a financial year to any rural household whose adult members are willing to participate in unskilled manual work. The Act is an important step towards realization of the right to work and aims at enhancing people's livelihood on a sustained basis, by developing the economic and social infrastructure in rural areas. To fasten the pace of financial inclusion Government of India in 2008 declared that wage payments, under Mahatma Gandhi National Employment Guarantee Act, would be made through banks and post office. Since then nearly ten crore banks and post office accounts have been opened and around 80 per cent of MGNREGA payments have been made through formal financial institutions, it is expected to have resulted in enhancing the financial inclusion of poor and marginalized sections of the society.

# REVIEW OF LITERATURE

❖ Jawed Akhtar et al. (2014) have published an article entitled "INDEX OF FINANCIAL INCLUSION THROUGH MGNREGS: A SPECIAL REFERENCE TO KERALA". The authors ascertain index of financial through MGNREGS. They are constructing the Index of financial inclusion where several indicators have been used to assess the extent of financial inclusion through the implementation of MGNREGS. The researchers framing three dimension for calculating index of financial inclusion. The factors are number of bank where MGNREGS wage transaction are take place to measure the availability dimensions, considering the number of MGNREGS workers who have bank accounts as an indicator of banking penetration and take the amount of MGNREGS wage disbursed through the bank account as an indicator of banking disbursement.

- \* Ramesha (2015) has published an article entitled 
  " A STUDY ON FINANCIAL INCLUSION AND MGNREGP". The author said that low literacy levels, irregular incomes and lack of trust on banking institutions is the reason for financial exclusion. He suggested that there is a need for coordination among the stakeholders like sectoral regulators, banks, government, civil societies and NGO's, etc., MGNREGS has contributed to the financial inclusion drive in rural India. It is observed that a significant proportion of the households especially in rural areas are still outside the formal hold of the banking system.
- ❖ Gupta and Fearooz Ahmed (2014) have published an article entitled "MGNREGA & FINANCIAL INCLUSION- A CASE STUDY". The author describe that some constraints faced by banks and post offices in accelerating the speed of financial inclusion. And has been tremendous growth in opening of bank accounts in the study area. We also suggests that more and more awareness camps should be organized in villages to make full awareness of basic banking services among rural people in villages.
- Nagaraju (2015) have published an article entitled "FINANCIAL INCLUSION MGNREGA" .The researchers said that the MGNREG scheme contributed to perhaps the largest financial inclusion drive in rural India in recent times. Workers with individual MGNREGA bank accounts are highest in Kerala(73%) followed bv Andhra Pradesh(61%), Tamil nadu(49%), and Himachal

- pradesh(39%). We believe that financial inclusion drives when linked to social security schemes such as MGNREGA can increase the financial inclusion.
- Ashish Kumar Mishra and Manisha Dudey (2015) have published an article entitled "FINANCIAL INCLUSION **AMONG** MGNREGA WORKERS IN CHHATTISGARH". The authors concluded that majority of the MGNREGA workers are opening bank account after joining the MGNREGA scheme. While MGNREGA played an important role regarding the financial inclusion of rural people of Chhattisgarh and findings indicated that MGNREGA has changed the scenario of financial inclusion in rural area but as for concern insurance, it increased marginally.

# OBJECTIVES OF THE STUDY

- ❖ To know the concept of Financial Inclusion Index (FII).
- To study the growth in funds disbursal across various segments in terms of account opening and magnitude of wages disbursal in the study area.
- To ascertain Financial Inclusion Index (FII) through MGNREG Scheme.

## **METHODOLOGY**

The study is purely based on the secondary data. The data required for the study are collected from books, journals, articles, newspapers, internet, record from Ministry of Rural Development and MGNREGA website (www.mgnrega.nic.in).

### PROFILE OF THE STUDY AREA

The study has been carried out in Virudhunagar District in which MGNREGA was notified in the Year 2008. As per 2011 census the district is having 11 blocks with 450 Panchayats and with a total population of 1286543 in which 315796 is SC population and 1197 is ST population and remaining are others. There are 338601 numbers of beneficiaries/ workers working under MGNREGA scheme in the year 2016-17. The number of people who have been connected to banks & post offices in

relation to MGNREGA payments has been 230224 in the year 2016-17, which is 68%.

# ANALYSIS AND INTERPRETATION OF DATA

Number of bank account opens through MGNREG Scheme

Table 1: Number of bank account open through MGNREG Scheme

Year	No of Bank	Increase /	Annual
	account opened	Decrease	Growth rate
2012-13	178546	-	-
2013-14	201902	23356	13.08
2014-15	220691	18789	9.30
2015-16	230171	9480	4.30
2016-17	230224	53	0.023

Source: Secondary Data

It is observed from Table 1 that the number of bank account opened through MGNREG scheme in virudhunagar district. It was 178546 in 2012-13, which increased to 230224. The maximum growth rate of 13.08 per cent was registered in 2013-14 and the minimum of 0.023 per cent in 2016-17

Amount of wage disbursed through MGNREGS bank account

Table 2 : Amount of wages disbursed through Bank account

Year	Amount of Wages	Increase/	Annual
	disbursed through	Decrease	Growth
	bank account(In		Rate
	lakhs)		
2012-13	6788.57	-	-
2013-14	7439.91	651.34	9.59
2014-15	5762.8	-1677.11	-22.54
2015-16	8239.9	2449.44	42.50
2016-17	7580.74	212.33	2.59

Source: Secondary Data

It is clear from Table 2 that the amounts of wages disbursed through MGNREG scheme bank account in virudhunagar district were Rs 6788.57 lakhs in 2012-13, which increased to Rs 7439.91 lakhs in 2013-14, then it decreased to Rs 5762.8 lakhs in 2014-15 and again increased to remaining year. The growth rate of the same also showed a fluctuating trend ranging between -22.54 per cent in 2014-15 and 42.50 percent in 2015-16.

Financial participation of MGNREG Scheme workers Table 3: Financial participation of MGNREG Scheme workers

Year   Total No of   Total No of   Financial		Year	Total No of	Total No of	Financial
----------------------------------------------	--	------	-------------	-------------	-----------

	Registered	Bank account	Participation
	worker	holders	(%)
2012-13	338409	178546	52.76
2013-14	338409	201902	59.66
2014-15	338601	220691	65.18
2015-16	338601	230171	67.98
2016-17	338601	230224	68.00
Average annual Financial participation			62.72

Source: Secondary Data

Table 4.3 shows that the financial participation of MGNREG scheme workers. The financial participation of MGNREG scheme workers had increased to 52.76% in 2012-13 from 68.00% in 2016-17. The average annual financial participation of MGNREG scheme workers in virudhunagar was 62.72%.

# DIMENSIONS OF FINANCIAL INCLUSION INDEX (FII)

Financial inclusion is the most important variable conducting correlation analysis. Financial inclusion is measured with help of Financial Inclusion Index (FII). For constructing the Financial Inclusion Index (FII) several indicators have been used to assess the extent of financial inclusion through the implementation of MGNREGS. The most commonly used indicator is availability of banking services, banking penetration and banking disbursement. The various dimensions of FII are follows:

Availability of banking services (dimension  $D_1$ ):

The services of an inclusive financial system should be easily available to its users. Availability of services can be indicated by the number of bank outlets and/or by the number of ATM per 1000 people, or the number of bank employees per customer. In the absence of comparable data on the number of ATMs and number of bank staff for a large number of states, we use the number of bank where MGNREGS wage transactions take place to measure the availability dimension. There are about 376 banks working across the countries where banking services are available to the MGNREGS workers.

Banking penetration (dimension  $D_2$ ):

An inclusive financial system should have as many users as possible, that is, an inclusive financial system should penetrate widely amongst its users. The size of the "banked" population, i.e. number of people having a bank account is a measure of the

banking penetration of the system. Thus, if every person in an economy has a bank account, then the value of this measure would be 1. Here we are considering the number of MGNREGS workers who have bank accounts as an indicator of this dimension. Banking disbursement (dimension D<sub>3</sub>):

The wage payments through banks make millions of people habit of banking and inclusion to the financial system. We are considering here the amount of MGNREGS wage disbursed through the bank account. With the number of accounts of 2.51 crore for MGNREGA workers this becomes largest financial inclusion scheme of the rural poor by which wages are disbursed through this account.

The dimension index for the i<sup>th</sup> dimension, di, is computed by the following formula.

$$D_{i=}^{Ai-mi}/Mi-mi \tag{1}$$

Where

 $A_i = Actual value of dimension i$ 

 $m_i = Minimum value of dimension i$ 

 $M_i = Maximum$  value of dimension i

After computing each dimension value the Financial Inclusion Index (FII) is computed with help of following formula.

FII=
$$1-\sqrt{((1-D1)^2+(1-D2)^2+(1-D3)^2}$$
) /3 (2)

Depending on the value of FII we can measure the level of financial inclusion

- ❖ 0.5 < FII < 1 High Financial Inclusion
- 0.3 < FII < 0.5 Medium Financial Inclusion
- 0 < FII < 0.3 Low Financial Inclusion.

Financial Inclusion Index through MGNREG scheme in Virudhunagar District

Table 4: Financial Inclusion Index Through MGNREG scheme

Year	Dimension	Dimension	Dimension	FII
	1	2	3	
201	0.6538461	0.1944481	0.2330228	0.3274
2-13	5384	2638	4548	(Medi
				um
				Level)
201	0.6538461	0.2075619	0.3012378	0.3581
3-14	5384	7492	6946	(Medi
				um
				Level)
201	0.6538461	0.1931478	0.2331984	0.3269
4-	5384	9717	4599	(Medi
15				um

				Level)
201	0.6538461	0.2013699	0.1835505	0.4116
5-	5384	598	4352	(Medi
16				um
				Level)
201	0.6538461	0.2014552	0.2766987	0.3857
6-	5384	4002	9998	(Medi
17				um
				Level)

Source: Computed Secondary Data

It is inferred from Table 4 that during the year 2012-13 virudhunagar district having medium level (0.3274) financial inclusion, and in the year 2013-14 the financial inclusion index value is 0.3581, 2014-15 is 0.3269, 2015-16 is 0.4116 and in the year 2016-17 virudhunagar district having medium level (0.3854) financial inclusion.

#### FINDINGS OF THE STUDY

- Number of bank account opened through MGNREG scheme in virudhunagar district. It was 178546 in 2012-13, which increased to 230224 in 2016-17 with a maximum growth rate of 13.08.
- Amount of wages disbursed through MGNREG scheme bank account in virudhunagar district were Rs 6788.57 lakhs in 2012-13, which increased to Rs 7439.91 lakhs in 2013-14, then it decreased to Rs 5762.8 lakhs in 2014-15 and again increased to remaining year.
- Financial participation of MGNREG scheme workers had increased to 52.76% in 2012-13 from 68.00% in 2016-17 with an average annual financial participation of 62.72%.
- It is observed from the study virudhunagar district comes under the category of medium level financial inclusion during the period of study.

# SUGGESTIONS

- ❖ Wage payments under MGNREGA scheme should be increased so that more and more people are ready to do work under the scheme which may result in greater financial inclusion.
- It is recommended that more and more MGNREGA workers should be motivated to make regular operations in their accounts, as it

- will lead to inculcating of savings habits among them.
- Without greater employment participation better financial inclusion is not possible. So that the Government of India and Ministry of Rural development may increase the number of working days under this employment scheme.
- ❖ Government should incorporate new types of works under MGNREG scheme i.e., works related to agricultural sector so that all people may join the scheme, which will result in greater financial inclusion in the rural areas.

#### CONCLUSION

Over a period, various measures have been taken to enhance financial inclusion among the most vulnerable groups of people living mainly in the rural areas. Financial inclusion is the process of including financially excluded people. In this regard, MGNREG scheme wage payment is largest financial inclusion drive in India. The new payment system of MGNREG scheme has increased the financial literacy among the vast section of rural participating households, most of whom are poor. The opening of bank account has brought the poor into organized financial sector. Therefore, the introduction of new payment system of this programme can be considered the largest financial inclusion drive in rural India in recent times. In Virudhunagar district through this scheme 230224 bank account were opened and totally 62.72 per cent workers are financially included.

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