CHAPTER – I

INTRODUCTION AND RESEARCH DESIGN
CHAPTER – I

INTRODUCTION AND RESEARCH DESIGN

1.1 Introduction

National Rural Employment Guarantee Act (NREGA) was passed with an aim of improving the purchasing power of the rural people, primarily semi or un-skilled work to people living in rural India, whether or not they are below the poverty line. Around one-third of the stipulated work force is women. The government is planning to open a call center, which upon becoming operational can be approached on the toll-free number, 1800-345-22-44. NREGA is a historical step taken to provide guaranteed employment to the rural people (The Gazette of India, 2005). There are wage employment programmes like NREP, RLEGP, EAS, JGSY, JRY etc., but NREGA was passed in the Parliament and enacted in September 2005 and brought into effect from February 2006. NREGA scheme was launched in 200 most backward districts of the country with the objective of providing 100 days of guaranteed wage employment to the unskilled persons to each rural household (The Gazette of India, 2006).

NREGA scheme provides a legal guarantee for 100 days of employment in every financial year to adult members of any rural household willing to do public work-related unskilled manual work at the statutory minimum wage of ₹100 per
day. The Central Government outlay for scheme is ₹39,100 crores ($8 billion) in the year 2009-10.

**National Rural Employment Guarantee Act**

National Rural Employment Guarantee Act was enacted by the Central Government on 7th September 2005. The first phase of the scheme in India was implemented in 200 districts. In 2007 and 2008 the scheme was further extended to 330 more districts. The scheme has been in operation since from 1st April 2008 in the remaining districts in India. The NREGA has been functioning in the name of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) from 2nd October 2009 (Ministry of Rural Development 2009).

The aims of Mahatma Gandhi National Rural Employment Guarantee Scheme are to improve the standard of life in the rural people, create long-standing assets, developing the rural infrastructure and giving employment to all the rural people. The scheme has been implemented in various level. Various schemes implemented by the government failed to give employment opportunities to the dependent. But MGNREGS does it by acting as an employment source. MGNREGS creates dimension of equality, employment is given to all dependents for nearly 100 days.

MGNREGS assures the work asked by the dependent and gives work within its period, so getting work becomes their legal rights. MGNREGS promotes accountability, the officers who implement plans are answerable to employees. Therefore the actual purpose of democracy is achieved hereby through
transparency. MGNREGS therefore covers dimensions from employment assurance to reforming the rural economy. The MGNREGS has unique feature like people who want to work in this scheme can apply orally or in written form to the panchayat.

Panchayat scrutinizes carefully the application and then distributes the work card (who wants employment) with the photo of that person in the card and no charge is levied for this. The beneficiaries under the MGNREGS should be one third of women employees in total. Every panchayat should provide water facilities, rest rooms near the work place.

The panchayat should give work within 5 kilo metre surroundings where the employees domicile. In case the work could not be given within the 5km limit, panchayat can give work within the taluk, in that case the beneficiary gets 10 per cent allowance. All people above the age of 18 and willing to do ordinary physical work can avail this scheme. There should be atleast 50 employees to work to start any work. Employees who register their names should work with a minimum period of 14 days and not more than 6 days per week. Employees should bring pickaxe and other household appliances for doing the work.

The MGNREG Scheme has made favourable impacts in the life of crores of people in rural India. According to the Comptroller and Auditor General’s (CAG) report there exists defect in implementing the scheme. Some say that this scheme is a corrupted one and some say that it is a good scheme important for rural development. Because of this scheme, so many has got employment and also
various public assets has been created. But in some villages the funds allotted for this scheme are embezzled by the authorities. The problems arising out of implementing this scheme are very small. There are examples whereby implementing transparent safety factors, the corruption can be prevented. The social audit reports the better functioning of MGNREGS in certain areas. Researchers say misusing fund, corruption in attendance report and other corruption can be prevented. Various corruptions in the schemes can be brought into light through social audit and through Right to Information litigations. The village panchayat should prepare the estimation of schemes to be carried under this scheme. The files and accounts relating to MGNREGS should be maintained properly. Photocopies of the files should be given to anyone who demands in detail, for which fee may be charged from that person. The Central Government shall bear the expense of 75 for unskilled workers allowance, administrative maintenance expenses in providing facilities at work place and also the expenses of National Work Guarantee Committee (Ministry of Rural Development, 2012).

The State Government will bear the expenses of the remaining 25 per cent to the half skilled wagers, unemployment scheme and administrative expense of State Work Guarantee Committee. The number of workers in this scheme differs from state to state and also from district to district. The works in MGNREGS are mainly given to backward areas.

A website has been created to administer and supervise the MGNREGS through internet. In this website information relating to work register, work card,
attendance, selection of works and implementing, funds for concerned schemes, its value, schemes in progress, work sought and work given, fund in hand, expended fund, wage, materials, statistics of money allotted for administrative expenses can be known.

As a part of scheme, government and private organizations are allowed to do field work to supervise the continuance of the scheme. Central and State Work Guarantees are created. It is a rule to create supervision and inspection group which is composed of local people to oversee the inspection of works and to see the development of the panned work.

According to Work Guarantee Scheme Act 11 (1.f) rule says that the annual report shall be submitted before the State assembly and in Parliament. The local people solution helps in solving the problems faced during implementation. A website called nrega.net was created to know and share the local solution. Sharing the experience of MGNREGS implementation, linking the people and giving intellectual information is its prime objective of this website (www.nrega.nic.in.).

Recently an award called Rozgar Jagran Puraskar was announced to the citizen social group who give better contribution to MGNREGS. The purpose of this award is to recognize such citizen social group those work in regional, district and state levels.

The State and Central Government gives training to panchayat presidents, and various other implementing officers. The district administration gives one day training camps for all the village presidents. It creates awareness among the
people and officers who implement the scheme by interpreting the provisions of MGNREGS through radio, television, films, newspaper, pamphlets, and also they conduct work festival once for every two weeks.

According to MGNREGA in Section 2(f), the definition of “household” means the members of a family related to each other by blood, marriage or adoption and normally residing together and sharing meals or holding a common ration card (www.nrega.nic.in.).

1.2 MGNREGP in India

In India most of the rural people depend on practicing agriculture and other allied works, so various schemes are implemented by the government to benefit the rural people and to increase their social and economic development. The MGNREGP is a scheme which is obviously improves the economic status of rural people throughout India.

Performance of NREGA in India

NREGA is the first ever law internationally, that guarantees wage employment at an unprecedented scale. The primary objective of the Act is augmenting wage employment. Its auxiliary objective is strengthening natural resource management through works that address causes of chronic poverty like drought, deforestation and soil erosion and so encourage sustainable development. The process outcomes include strengthening grassroots processes of democracy and infusing transparency and accountability in governance.
The Act is also a significant vehicle for strengthening decentralization and deepening processes of democracy by giving a pivotal role to the Panchayat Raj Institutions in planning, monitoring and implementation. Unique features of the ACT include, time bound employment guarantee and wage payment within 15 days, incentive-disincentive structure to the State Governments for providing employment as 90 per cent of the cost for employment provided is borne by the Centre or payment of unemployment allowance at their own cost and emphasis on labour intensive works prohibiting the use of contractors and machinery. The Act also mandates 33 per cent participation for women. Over the last two years, implementation trends vindicate the basic objective of the Act.

**Increasing Employment Opportunities**

In 2007-08, 3.39 crore households were provided employment and 143.5 crore person days were generated in 330 districts. In 2008-2009 upto July, 253 crore households have been provided employment and 85.29 crore person days have been generated.

**Enhancing Wage Earning and Impact on Minimum Wage**

The enhanced wage earnings have lead to strengthening of the livelihood resources based on the rural poor in India; in 2007-2008, more than 68 per cent of funds utilized were in the form of wages paid to the labourers. In 2008-2009, 73 per cent of the funds have been utilized in the form of wages.
The Government of India has notified the wage rate payable to the unskilled manual workers under MGRNEGS is respect of all states and union territories with effect from 01.04.2015. The Government of India has enhanced the wage rate from ₹167 to ₹183 per day per person payable for the unskilled manual workers under MGNREGS in respect of Tamil Nadu.¹

**Increasing Outreach to the Poor**

Self targeting in nature, the Programme has high works participation of marginalized groups like SC and ST (57%), women (43%) in 2007-2008. In 2008-2009, up to July, the participation is SC and ST (54%) and women (49%) strengthening natural resources base of rural India. In 2007-08, 17.88 lakh works have been undertaken, of which 49 per cent were related to water conservation. In 2008-2009 upto July, 16.88 lakh works have been undertaken, of which 49 per cent are related to water conservation.

**Financial Inclusion of the Poor**

The Central Government has been encouraging the state governments to make wage payment through bank and post office accounts of wage seekers. Thus far, 2.9 crore (upto July 2008) NREGA bank and post office accounts have been opened to disburse wages. The Ministry is also encouraging the NREGA workers to obtain insurance under Jan Shri Bima Yojana.²

---

² NREGS: Implementation in India source-nreg.org
Initial evidence through independent studies indicates enhancement of agricultural productivity through water harvesting, check dams, ground water recharging, improve moisture content, check in soil erosion and micro-irrigation, stemming of distress migration, increased access to markets and services through rural connectivity works, supplementing household incomes, increase in women workforce participation ratios and the regeneration of natural resources.

The vision of the Ministry is enabling NREGA become a transformative vehicle of empowering local communities to enhance their livelihood security. The Ministry has taken several steps to ensure the Scheme is implemented effectively like encouraging decentralized participatory management, improving delivery systems and public accountability.

1.3 MGNREGP in Tamil Nadu

The MGNREGS was started on 02.02.2006 in Tamil Nadu. The Scheme was started in 2006 as first phase in six districts. They are Villupuram, Cuddalore, Nagapattinam, Sivagangai, Tiruvanamalai and Dindigul. The second phase of the scheme was implemented in 2007 in the districts of Thirunelveli, Thanjavur, Thiruvarur and Karur. From 1.4.2008 onwards the scheme was implemented in the remaining 20 districts of Ariyalur, Dharmapuri, Perambalur, Pudukkottai, Ramanathapuram, Namakkal, Vellore, Thoothukudi, Virudhunagar, Salem, Erode,
Tiruchirapalli, Kanchepuram, Theni, Thiruvallur, Madurai, Nilgiri, Kanniyakumari, Coimbatore and Krishnagiri.\(^3\)

The National Rural Employment Guarantee Scheme has been functioning in the name of Mahatma Gandhi National Rural Employment Guarantee Scheme from 2\(^{nd}\) October 2009. Under this scheme ₹2,939 crore and 19 lakhs has been expensed so far in Tamil Nadu.\(^4\)

The spending on wages for beneficiaries under the National Rural Employment Guarantee Scheme (NREGS) in Tamil Nadu has crossed ₹1,200 crore so far this year, and the state may exceed ₹2,000 crore for 2009-10. This would be two times the expenditure of ₹990 crore last year.

The state has logged 16 crore person-days involving 30 lakh households, and the wages involved have been mainly disbursed in cash. The Centre is insisting that it would release funds for the scheme only if wage payments are made only through bank or post office accounts, but Tamil Nadu has voiced concern over the move.

The state government feels it is on sound legal footing when it opposes the idea of making bank payments compulsory. "The NREG Act itself permits payment of wages in cash. Section 23 of the Act makes it clear that "all payments of wages in cash and unemployment allowances shall be made directly to the person concerned and in the presence of independent persons of the community on"

\(^4\) ‘The Hindu’ Chennai 2007, p.5.
pre-announced dates". This is exactly what we are doing," points out rural
development secretary K Ashok Vardhan Shetty.⁵

In 2007-08 years, the central government awarded 22 districts from 13
States out of 612 States for best performance in implementing the scheme. In this
Dindugal, Sivagangai, Cuddalore districts were awarded for best performance
from Tamil Nadu.

In 2008-09 the central government has selected 24 districts from 15 States
for best performance in implementing the scheme. Nine districts have got two
awards from this. Nagapattinam and Villupuram districts are selected for award.⁶
On 2nd February 2016, Thiruvarur and Pudukottai districts are got the best
performance award.

This study aims at analyzing the performance of national rural employment
scheme of government of India. This scheme is implemented to provide a
guarantee of 100 days employment for the benefit of poor households in a
financial year. It is a major rural employment scheme of united progressive
alliance government. Initially this scheme was implemented in 200 districts in
India and later extended to all the rural districts of India from the financial year
2008-09. Consequent upon this situation the government of India has increased
144 per cent of financial allocation for the scheme. In order to implement the
scheme, the government of India has been spending crores of rupees. An analysis

⁵ www.nrega.nic.in
of performance of the scheme is highly useful for planning commission. This type of analysis enables the members of implementing authorities to identify the defects and problems in the existing system of implementation and such problems and defects will be corrected through proper government intervention.

The study of effectiveness of the scheme is highly useful to the planning commission members to identify the procedures of implementation of the scheme and to what extent guidelines in the act is adhered in the process of implementation. If guidelines are not properly followed an appropriate policy suggestions can be initiated. The scheme implementing authorities can learn to what extent expectations of rural households are fulfilled through the scheme. The report of the study will identify the problems and prospects of implementation of national rural employment scheme and impact of the scheme on wages, income and quality of life of rural households and also impact on out-migration. Such type of identification enables the planners to frame a suitable rural development planning in general and rural employment planning in particular.

1.4 Statement of Problem

In Indian context of the rural development, the planning commission takes over decision for implementing the rural development programmes. The planning commission and the government of India makes the five year plan for all the development activities throughout the country in infrastructural facilities in rural
and urban, industrial development, primary sector, education, health and other sectors.

Earlier in India the rural development programme were implemented like CDP, SFAP, MFAP, IRDP, NREP, RLEG, TRYSEM, JRY, NFFWP, SGSY for income and employment generation. Later for generating women empowerment in rural and urban areas through SHGs, NREGP and others are started to strengthen the earlier programmes. These programmes are implemented in rural and urban areas for alleviating poverty through employment generation which can be provide wage to workers.

There are adequate surplus labours in rural areas in India. Many programmes are implemented in rural areas to create the capital formation and generate employment and then improve the standard of living. Here, the researcher can across many programmes and has taken initiative to enrich and pointed out in details about MGNREGS. MGNREGS provides employment opportunity in every rural household that is 100 days per year. This enables them to get wage rate and to raise their standard of living in the country. The wage rate remains high and the incomes are distributed through employment.

Although some efforts are taken by the concerned authorities now and then, the rural poverty among the workers and other poor people in the rural area of Thoothukudi district could not be eradicated so far. Therefore, it is stated in concrete terms that there exists a real ‘research problem’ in the present research study and this study will also become ‘a model’ for emerging research studies in
several other backward areas of the economy, in the days to come. So, this warrants a study focusing attention on the performance of the livelihood schemes for the benefit of the vulnerable sections.

But in Thoothukudi district the standard of living and the income of the workers in the rural area are poor. At this juncture, the researcher has undertaken a study on the performance analysis on Mahatma Gandhi National Rural Employment Guarantee Scheme in Thoothukudi District of Tamil Nadu.

1.5 Objectives of the Study

The overall objective of the study is to know the performance of the MGNREGS in the study area. The specific objectives are

1. to study the setup and functioning of MGNREG Scheme in general;
2. to examine the socio-demographic characteristics of the workers of MGNREGS in the study area;
3. to evaluate the wage structure, awareness level, work site facilities, and problems faced by MGNREGS workers.
4. to determine the impact of the MGNREGS in the study area;
5. to trace the empowerment effect among the MGNREGS workers; and
6. to suggest suitable measure for the effective functioning of the scheme.

1.6 Hypotheses of the Study

The present study attempts to test the following hypotheses in line with the objectives mentioned above.
1. There is no relationship between the implementation of the MGNREGS and the increases in respect of employment generation, family income and expenditure pattern of rural workers in the study area.

2. The wage earnings from MGNREGS are positively associated with awareness score.

3. There is no significant inter block variation with respect to impact of Mahathma Gandhi National Rural Employment Guarantee Scheme on rural livelihood.

1.7 Theoretical Background of the Study

Great Depression of the 1930s has proved that without government intervention, economy could not work and Laissez-faire policy was criticized by Keynes. MGNREGS can be taken akin to the interventionist policy as prescribed during the Great Depression in US by Keynes. These programmes are based on a Keynesian aggregate demand strategy of direct job creation by the government for a full employment economy which creates purchasing power among workers. The great thing about MGNREGS from this point of view is that it is keeping money into the hands of those whose MPC is the highest. This programme based on government expenditure would be stabilizing and stimulating the economy by generating guaranteed employment (Azeez et al., 2013).

Several empirical studies supports the role of MGNREGS in achieving livelihood security and promoting sustainable development. These studies depicts
that MGNREGS programme has given mixed results so far in rural India. Ratna M. Sudarshan (2010) reports that improved productivity are encountered in the course of the field work. In one panchayat in Kerala, it was reported that a large tank restoration job in 2007 turned single crop rice fields into double crop areas. Harish et al., (2011) reports that the MGNREGS has improved the labour scarcity for agriculture, and labour availability before MGNREGS implementation was 1.9 person days, with a labour scarcity of 32.14 per cent. With the implementation of the programme, the labour availability was of 0.3 person days only, which lead to acute labour scarcity of 89.29 per cent. Thus the absolute scarcity due to MGNREGS was of 51.14 per cent.

The doctrine of balanced growth is interpreted by several authors in their own way. The theory of balanced growth states that there should be simultaneous and harmonious development of different sectors of the economy, so that all sectors and all section of the people grow in unison. The doctrine of balanced growth has been advocated by Rosenstein Rodan, Ragnar Nurkse and Arthur Lewis (Jhingan, 2005). Rosenstein Rodan was the first economist who propounded the theory of balanced growth. According to him social and marginal product of an investment will increase the rate of growth of the economy.

The most pertinent obstacle to economic development is the shortage of capital. Poverty is both a cause and a consequence of a country’s low rate of capital formation. The low level of real income reflecting low investment and capital deficiency is a common feature of the vicious circle of poverty.
The concept of the ‘multiplier and accelerator effect’ explained by Keynes that was borrowed from macro economics and adapted to an agrarian economy. He explained how MGNREGS could do in a recession. MGNREGS will stimulate demand as it provides money in the hands of rural poor who have the highest Marginal Propensity (MPC) to Consume. In this way it will stimulate production of goods, income and create demand in the economy. A mutually reinforcing relationship between investment and income catalysed by MGNREGS as the workers rebuild the small farms and give them a chance to return to full-time farming which in turn spurs further investment. They suggested the convergence of MGNREGS, with other rural livelihood programmes and creation of a cadre of dedicated executive agencies to carry this momentum forward in a positive upward spiral. This will become broad based growth process.

All the above mentioned theories point out that capital / investment is essential to bring the economy to the stage of development. In this context MGNREGS are for investing and generating employment, thereby helping the rural mass to come out of vicious circle of poverty and to move towards the path of development assumes greater importance.

1.8 Methodology

The main purpose of the study is to have a critical view of the MGNREGS schemes. Therefore, emphasise is laid more on the information supplied by the
MGNREGS schemes supplemented by the secondary data. Thus the present study is based on both primary and secondary data.

1.8.1 Area of the Study

Thoothukudi district of Tamil Nadu has been chosen as the area of study, which comprises of two revenue divisions namely, Thoothukudi and Kovilpatti. There are eight taluks and 12 blocks in this district. Out of the 12 blocks, three rural blocks have been selected for this study. They are Kovilpatti, Ottapidaram and Villathikulam blocks.

1.8.2 Collection of Data

The primary data has been collected from members of MGNREGS workers in Kovilpatti, Ottapidaram and Villathikulam blocks through interview schedule (Appendix I). A pre-tested interview schedule will be used to collect informations from the member of MGNREGS. Adequate precaution will be taken to ascertain the correct information. However, the workers have to rely on their memory for the supply of information, any laps on their memory may affect the investigation findings.

The secondary data has been collected from the Block Office, Panchyats, books, magazines, published pamphlets, web site information, leaflets and unpublished research papers.
1.8.3 Sampling Design

There are two reasons for identifying Thoothukudi as the universe for this study. First, the district has a large number of MGNREGS works and workers. Secondly, the researcher is much familiar with the area and so it is convenient the scholar to get the co-operation of the officials as well as respondents.

There are 12 blocks in Thoothukudi district namely, Thoothukudi, Srivaikuntam, Karunkulam, Tiruchendur, Udangudi, Alwarthirunagari, Satankulam, Ottapidaram, Kovilpatti, Kayathar, Vilathikulam and Pudur, out them only three blocks, namely Ottapidaram, Kovilpatti and Vilathikulam, are selected for this study. The MGNREGS fund allotment and works are more in the above three blocks. There are 80,581 households and 79,697 MGNREGS beneficiaries in these three blocks as per the government records. Since the census study of such a large number of members is very difficult and also time consuming, the investigator adopted a sampling technique to identify the sample respondents. Multi-stage stratified random sampling technique has been adopted for the study taking Thoothukudi District as the universe, the block as the stratum, the village as the primary unit and MGNREGS beneficiaries are ultimate unit.

In Ottapidaram block, there are about 61 revenue villages, about 58 revenue villages are there in Kovilpatti block and about 51 revenue villages are there in Vilathikulam block.

Within these 61 revenue villages of Ottapidaram block, there are 29,322 MGNREGS beneficiaries households. Similarly in Kovilpatti block, there are 58
revenue villages, with 25,717 MGNREGS beneficiaries households. In Vilathikulam block, there are 51 revenue villages with the total number of MGNREGS beneficiaries households of 24,899. Totally, there are 170 revenue villages with 79,697 MGNREGS beneficiaries households in these three blocks. By giving due weightage to the number of villages in each block, 35 revenue villages from Ottapidaram block, 34 revenue villages from Kovilpatti block and 29 revenue villages from Vilathikulam block were selected at random.

Finally, there were 57,912 MGNREGS beneficiaries households among 98 revenue villages identified. From each revenue village one per cent of the MGNREGS beneficiaries households were selected randomly for the study. Hence, a total of 579 sample households were selected. It is shown in the Table 1.1.

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Name of the Block</th>
<th>No. of Households</th>
<th>Total No. of Beneficiaries</th>
<th>Selected Beneficiaries</th>
<th>No. of Sample Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ottapidaram</td>
<td>29,322</td>
<td>29,081</td>
<td>24,642</td>
<td>246</td>
</tr>
<tr>
<td>2.</td>
<td>Kovilpatti</td>
<td>26,021</td>
<td>25,717</td>
<td>17,270</td>
<td>173</td>
</tr>
<tr>
<td>3.</td>
<td>Vilathikulam</td>
<td>25,238</td>
<td>24,899</td>
<td>16,000</td>
<td>160</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>80,581</strong></td>
<td><strong>79,697</strong></td>
<td><strong>57,912</strong></td>
<td><strong>579</strong></td>
</tr>
</tbody>
</table>


The data have been collected by personal interview method through a pre-tested interview schedule with the help of users’ recall method, subject to the
limited memory power of the respondents to give authentic data. The collected
data were carefully processed, edited and tabulated for analytical purposes.

1.8.4 Period of Study

The period of study is taken for the last financial year i.e. 2014-15. The researcher has used interview schedule for collecting data from workers and collected data generally on holidays. The interview was quite informal and was recorded by the researcher in the interview schedule. Care was taken to ensure completeness and accuracy in the interview.

1.8.5 Tools for Analysis

After the fieldwork, the data have been carefully scrutinised and edited in order to ensure accuracy, consistency, and completeness. Most of the analyses are based on the responses presented in the form of frequency tables. The data tabulated are systematically processed and interpreted on the basis of the objectives formulated. Statistical tools such as percentage, averages are used for basic analysis and multiple linear regression, Garrett Ranking Techniques and factor analysis are used for empirical analysis.

1. Garrett Ranking Technique

Garrett Ranking Technique was used to rank the problems. The ranks were assigned and points were given in the following order.

1 – Rank = 5 points
2 – Rank = 4 points
3 – Rank = 3 points
4 – Rank = 2 points
5 – Rank = 1 point

After assigning points to various ranks, the Garrett mean score was calculated by using the following formula.

$$\text{Present Position} = \frac{100(Rij - 0.5)}{Nj}$$

where,

Rij – Rank given for the i\textsuperscript{th} reason by j\textsuperscript{th} respondents

Nj – Number of factors ranked by j\textsuperscript{th} respondents.

2. Gini Concentration Ratio

In order to find out the correct estimation Gini concentration ratio was calculated.

The Gini coefficient is stated as

$$G = 1 - \Sigma p_i (Z_i + Z_{i-1})$$

where

P\textsubscript{i} = cumulative percentage of person

Z\textsubscript{i} = cumulative percentage of income.

3. Income Function

The quantitative relationship between the income and the determinants are studied by fitting a linear income function with income as the dependent variable
and family size, education, number of working days, number of earners and value of assets as independent variables. The function applied to a cross section of MGNREGS workers examine the factors influencing the income of the respondent model is,

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e \]

where,

- \( Y \) - Annual Income of the Family (in ₹)
- \( X_1 \) - Family Size (in number),
- \( X_2 \) - Education Status (\( X_2 = 1 \) for Illiterate,
  \( X_2 = 2 \) for Primary level,
  \( X_2 = 3 \) for High School level,
  \( X_2 = 4 \) for Higher Secondary level,
  \( X_2 = 5 \) for Degree level and
  \( X_2 = 6 \) for Professional level
- \( X_3 \) - No. of Working Days
- \( X_4 \) - No. of Earners (in number)
- \( X_5 \) - Value of assets (in ₹)
- \( e \) - Error term

4. Saving Function

An attempt has been made to identify the factors which determine the value of savings of the respondents of MGNREGS workers in Thoothukudi district. For this, the following form of multiple regression model has been used.
\[ S_a = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + U \]

where,

\( S_a \) - Volume of Savings in rupees per annum,

\( X_1 \) - Income in post MGNREGS work (in \( \text{₹} \)),

\( X_2 \) - No. of Working Days (in Number),

\( X_3 \) - Family Size (in number),

\( X_4 \) - Education Status (\( X_4 = 1 \) for Illiterate,

\( X_4 = 2 \) for Primary level,

\( X_4 = 3 \) for High School level,

\( X_4 = 4 \) for Higher Secondary level,

\( X_4 = 5 \) for Degree level and

\( X_4 = 6 \) for Professional level

\( X_5 \) - Borrowing in Post MGNREGS Work (in \( \text{₹} \))

\( \beta_0, \beta_1, \ldots \ldots \beta_5 \) are the parameters to be estimated

\( U \) - Error term

5. **Lorenz Curve Approach**

The measure of the degree of inequality in the distribution of income of the construction workers is carried out by using Lorenz curve. Lorenz curve is given as a box diagram and the 45\(^0\) line represents the line of equal distribution. Actual distribution is represented by their cumulative frequency curve. If the cumulative curve is far from the line of equality, then the inequality is higher for the distribution considered.
Gini ratio co-efficient is estimated with the help of the Lorenz curve. Gini ratio is the ratio of the area between the observed cumulative frequency curve and the line of equality and the area below 45° line. The Gini ratio, nearing zero indicates less inequality and the ratio approaching unity implies greater inequality.

6. Factor Analysis

In Factor analysis each variable is expressed as a linear combination of underlying factors. The amount of variance a variable shares with all other variables included in the analysis is referred to as communality. The variation among the variables is described in terms of a small number of common factors plus a unique factor for each variable. These factors are not overtly observed. If the variables are standardized, the factor model may be represented as

\[ X_i = A_{i1}F_1 + A_{i2}F_2 + A_{i3}F_3 + \ldots + A_{im}F_m + V_iU_i \]

\( X_i \) = ith standardized variable
\( A_{ij} \) = standardized multiple regression coefficient of variable i on common factor j
\( F \) = common factor
\( V_i \) = standardized regression coefficient of variable I on unique factor i
\( U_i \) = the unique factor for variable i
\( m \) = number of common factors
The unique factors are uncorrelated with each other and with the common factors. The common factors themselves can be expressed as linear combinations of the observed variables.

\[ F_i = W_{i1}X_1 + W_{i2}X_2 + W_{i3}X_3 + \ldots \ldots + W_{ik}X_k \]

Where

\[ F_i = \text{estimate of ith factor} \]
\[ W_i = \text{weight or factor score coefficient} \]
\[ k = \text{number of variables}. \]

1.9 Pilot Study

To find the validity of questions, the interview schedule is pre-tested with 50 respondents. The main objective of pre-testing is to find out the respondents’ opinions, the language used and to rule out ambiguities and doubts. During this exercise, several suggestions are received from the relevant respondents. In the light of those suggestions, several questions have been revised and some new questions are added in the final draft.

1.10 Scope of the Study

The study deals with the performance analysis of the Mahatma Gandhi National Rural Employment Guarantee Scheme in Thoothukudi District of Tamil Nadu. It helps the government authorities to understand the socio-economic character of the MGNREGS workers in the study area and to take necessary steps to solve their problems to a certain extent.
From the study of socio-economic conditions of the workers, the policy makers, government authorities, social workers and well wishers can take necessary steps to improve the present position of the MGNREGS workers in the study area.

From the study of functioning of the schemes, the government authority will find it easy to support the area with necessary funds and schemes.

This study will also help the government officials in the study area to take necessary steps to rectify the defects and also to adopt precautionary measures to have a peaceful relation with the MGNREGS workers in future.

The impact of the schemes on the beneficiaries, the super structure of the scheme (wage structure, awareness, working condition) and the empowerment aspects give a clear cut view of the research on the livelihood scheme and help for further researches on the betterment of the beneficiaries of the scheme.

1.11 Limitations of the Study

The research work is based on field survey made in the specific areas; therefore generalizations must be made with caution when applied to a large universe. The respondents are unable to give accurate figures regarding their income and consumption expenditure, debt and asset value. Attempts are made to arrive at correct figures by repeated and across questioning become only few are well informed respondents in the study area.
Although the scheme was introduced in the year 2006, only a limited number of workers are aware of the factors of the schemes so far. Some workers are yet to know the benefits of the schemes. The study is limited to examine the performance of only one district and so generalization must be done with care.

1.12 Organisation of the Study

This thesis is organized into seven chapters.

CHAPTER I – INTRODUCTION AND RESEARCH DESIGN

This chapter presents the introduction, significance of the study, statement of the problem, objectives of the study, hypotheses of the study, area of the study, methodology, uses of the study, limitations of the study and chapter scheme.

CHAPTER II – REVIEW OF LITERATURE AND CONCEPTS

This chapter attempts to give an overview of past studies related to MGNREGS workers. The studies of various researchers and scholars in the areas of socio-economic conditions, impact of the schemes, wages and employment and problems faced by the MGNREGS works are presented. Various concepts used in this study are also explained.

CHAPTER III – AN OVER VIEW OF MGNREGS AND THE STUDY AREA

It deals with the history and implementation of the MGNREG schemes in India, Tamil Nadu and Thoothukudi district and also deals with the profile of the study area.
CHAPTER IV – SOCIO-DEMOGRAPHIC CHARACTERISTICS OF MGNREGS WORKERS

This chapter examines the socio-demographic characteristics like sex, age, education, religion, community, family size, and housing pattern of the workers.

CHAPTER V – WAGE STRUCTURE, AWARENESS, WORKING CONDITION AND PROBLEMS OF MGNREGS WORKERS

It deals with the role of MGNREGS in wages structure, awareness level, work site facilities and problems faced by the workers.

CHAPTER VI – IMPACT OF MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE SCHEME IN THE STUDY AREA

This chapter indicates an analysis of the prospects of the MGNREGS workers such as employment, income, expenditure, savings, borrowings, and assets.

CHAPTER VII – SUMMARY OF FINDINGS, CONCLUSION AND SUGGESTIONS

A summary of the work done and leading findings of the study are presented in the concluding chapter. Conclusions are drawn after verifying the hypotheses of the study and their implications and the scope of further research is also added in this chapter.