

# **Impact of Awareness on the Efficacy of MGNREGA:**

## **A Study on North Sikkim**

DISSERTATION SUBMITTED TO  
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THE AWARD OF THE DEGREE  
OF  
“MASTERS OF PILOSOPHY IN ECONOMICS”

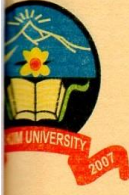
BY

**PANGZOR LEPCHA**

**Regn. No.: 14/M.Phil./ECN/06**



**DEPARTMENT OF ECONOMICS**  
**SCHOOL OF SOCIAL SCIENCE**  
**SIKKIM UNIVERSITY**  
**GANGTOK-737102**  
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# सिक्किम विश्वविद्यालय

(भारतके संसदके अधिनियमद्वारा स्थापित केन्द्रीय विश्वविद्यालय)

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I, Pangzor Lepcha, hereby declare that the thesis titled “**Impact of Awareness on the Efficacy of MGNREGA: A Study on North Sikkim**” submitted to the Department of Economics, Sikkim University for the degree of Master of Philosophy is my own work and that to the best of my knowledge it contains no materials previously published or written by others. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions.

I further state that no part of my thesis has already been or is being concurrently submitted for any such degree, diploma or other qualification.

**Pangzor Lepcha**

Regn. No. 14/M.Phil./ECN/06

Research Scholar,  
Department of Economics  
Sikkim University, Sikkim

We recommend this thesis to be placed before the examiners for evaluation.

**Dr. Rajesh Raj S. N.**

Supervisor  
Department of Economics  
Sikkim University  
6<sup>th</sup> Mile, Sikkim

**Dr. Komol Singha**

Head of the Department  
Department of Economics  
Sikkim University  
6<sup>th</sup> Mile, Sikkim

अध्यक्ष  
Head

अर्थशास्त्र विभाग  
Department of Economics  
सिक्किम विश्वविद्यालय  
Sikkim University

६ माइल, सामदुर, पीओ तादुङ-७६७१०२, गान्तोक, सिक्किम, भारत

फोन : ०३५९२-२५१०६७, २५१४६८, फ्याक्स-२५१८६५

6th Mile, Samdur, P.O. Tadong 737102, Gangtok, Sikkim, India

Phone : 03592-251067, 251468, Fax : 03592-251865

Website : www.cus.ac.in



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**Dr. Rajesh Raj S. N.**

Associate Professor,

Department of Economics

Sikkim University

6<sup>th</sup> Mile, Samdur, Tadong

Gangtok, Sikkim- 737102

६ माइल, सामदुर, पीओ तादुङ-७६७१०२, गान्तोक, सिक्किम, भारत

फोन : ०३५९२-२५१०६७, २५१४६८, फ्याक्स-२५१८६५

6th Mile, Samdur, P.O. Tadong 737102, Gangtok, Sikkim, India

Phone : 03592-251067, 251468, Fax : 03592-251865

Website : [www.cus.ac.in](http://www.cus.ac.in)

ii



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**“Impact of Awareness on the Efficacy of MGNREGA:**

**A study on North Sikkim”**

Submitted by Pangzor Lepcha under the supervision of Dr. Rajesh Raj S.N. of the Department of Economics, School of Social Sciences, Sikkim University, Gangtok Sikkim - 737102, India.

Signature of the candidate

Countersigned by the Supervisor

६ माइल, सामदुर, पीओ तादुङ-७६७१०२, गान्तोक, सिक्किम, भारत

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6th Mile, Samdur, P.O. Tadong 737102, Gangtok, Sikkim, India

Phone : 03592-251067, 251468, Fax : 03592-251865

Website : www.cus.ac.in

iii

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Place: Gangtok

Date:

- **Pangzor Lepcha**

## **LIST OF ABBREVIATIONS**

1.	2SLS	Two-Stage Least Square
2.	BDO	Block Development Officer
3.	BPL	Below Poverty Line
4.	CAG	Compound Annual Growth
5.	CAGR	Compound Annual Growth Rate
6.	DDO	District Development Officer
7.	DPC	District Planning Committee
8.	EAS	Employment Assurance Scheme
9.	GDP	Gross Domestic Product
10.	GP	Gram Panchayat
11.	GPU	Gram Panchayat Unit
12.	GRS	Gram Rozgar Sevak
13.	GSDP	Gross State Domestic Product
14.	IIM	Indian Institute of Management
15.	IV	Instrumental Variable method
16.	JGSY	Jawahar Gram Samridhi Yojana
17.	JRY	Jawahar Rojgar Yojana
18.	km	Kilo-metre
19.	m	Metre
20.	MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
21.	MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
22.	MR	Muster Roll
23.	MSME	Micro-Small and Medium Enterprises
24.	NE	North East
25.	NFFWP	National Food For Work Programme
26.	NFIW	National Federation of Indian Women

27.	NREGA	National Rural Employment Guarantee Act
28.	NREP	National Rural Employment Programme
29.	NSDP	Net State Domestic Product
30.	OLS	Ordinary Least Square method
31.	PHSC	Primary Health Sub Centre
32.	PMGSY	Pradhan Mantri Gram Sarak Yojana
33.	PO	Programme Officer
34.	PRIs	Panchayat Raj Institutions
35.	REGS	Rural Employment Guarantee Scheme
36.	RLEGP	Rural Landless Employment Guarantee Programme
37.	RTI	Right To Information
38.	SCs	Schedule Castes
39.	SGRY	Sampoorna Grameen Rojgar Yojana
40.	SREGS	Sikkim Rural Employment Guarantee Scheme
41.	STs	Schedule Tribes
42.	VECs	Village Employment Councils

## LIST OF FIGURES

	<u>Page No.</u>
<b>Figure 1.1:</b> Phases of NREGA implementation in Sikkim	7
<b>Figure 2.1:</b> Geographical area of North-East India (in per cent)	19
<b>Figure 2.2:</b> Comparison of Sex Ratio across North-Eastern States	24
<b>Figure 3.1:</b> Distribution of Households in North-East region	40
<b>Figure 3.2:</b> Trend line of Households demanded and provided Employment	51
<b>Figure 3.3:</b> Average Persondays Generated	52
<b>Figure 3.4:</b> Percentage of Households Completed 100 days of Employment	53
<b>Figure 3.5:</b> Women's Share in Persondays Generated	54
<b>Figure 3.6:</b> Person Days Generated	55
<b>Figure 3.7:</b> Percentage line of Works Completed (2006-2015)	58
<b>Figure 4.1:</b> Relation between Delay in Wage Payment and Awareness of Respondents	82
<b>Figure 4.2:</b> Relation between Participation and Awareness of Respondents	83
<b>Figure 4.3:</b> Relation between Participation of Workers in MGNREGA and Other Job Options	88



## LIST OF TABLES

	<u>Page No.</u>
<b>Table 1.1:</b> Time-Line of MGNREGA	6
<b>Table 2.1:</b> Area of North-Eastern states in comparison with India	19
<b>Table 2.2:</b> Area Occupied by Sikkim in North-East India	20
<b>Table 2.3:</b> Population of North-Eastern states in comparison with India (1991)	21
<b>Table 2.4:</b> Population of North-Eastern states in comparison with India (2001)	21
<b>Table 2.5:</b> Population of North-Eastern states in comparison with India (2011)	22
<b>Table 2.6:</b> Population size of Sikkim	23
<b>Table 2.7:</b> State-wise Growth of Population, 1991 - 2011	23
<b>Table 2.8:</b> Rate of Growth of Gross State Domestic Product (Per cent per year)	26
<b>Table 2.9:</b> Annual Rates of Growth of Per Capita Gross State Domestic Product (per cent per year)	28
<b>Table 2.10:</b> Percentage of population Below Poverty Line in North-Eastern states, 2004-05 – 2011-12	29
<b>Table 2.11:</b> Changes in BPL Population, 2004-05 and 2011-12	30
<b>Table 2.12:</b> Employment in the Organised Sector, 2010-12	31
<b>Table 2.13:</b> Employment in the Organised sector in North-East, 2010-12	32
<b>Table 2.14:</b> Unemployment Rate: A State-wise Comparison	33
<b>Table 2.15:</b> Literacy Rates in North-East India, 1951-2011	34

<b>Table 2.16:</b>	Health Indicators: A Comparison	35
<b>Table 3.1:</b>	Details of Employment Generated in North-East India, 2006-2011	46
<b>Table 3.2:</b>	Female Work Participation Rate and Female Share in MGNREGA Participation: A Comparison	47
<b>Table 3.3:</b>	Share of SC and ST in MGNREGA Participation and Share of SC and ST in States' Population	47
<b>Table 3.4:</b>	Details of Employment Generated in North-East India, 2011-2015	50
<b>Table 3.5:</b>	Work Progress in the North-East region, 2006-2015	57
<b>Table 3.6:</b>	Wage Payments Delay in North-Eastern States, 2012-2015	60
<b>Table 3.7:</b>	Comparison of Unskilled and NREGA Wage Rates in North-East Region (Rs per day), 2006-2015	62
<b>Table 3.8:</b>	Unemployment Allowance Payments	64
<b>Table 3.9:</b>	Grievances and Complaints under MGNREGA	65
<b>Table 4.1:</b>	Performance of MGNREGA in Sikkim: A District-wise Picture	72
<b>Table 4.2:</b>	Delay in Payment of Wage at the district level (in percent), 2012-2014	72
<b>Table 4.3:</b>	Stages of Sampling Strategy	74
<b>Table 4.4:</b>	Summary Statistics: General Characteristics	78
<b>Table 4.5:</b>	Summary Statistics: Awareness Level of Beneficiaries	79
<b>Table 4.6:</b>	Summary Statistics: Participation in MGNREGA	80
<b>Table 4.7:</b>	Summary Statistics: Payment of Wages	81

<b>Table 4.8:</b>	OLS and IV Regression Results	84
<b>Table 4.9:</b>	Correlates of Awareness	86

# CONTENTS

<b>DECLARATION</b>	<b>i</b>
<b>CERTIFICATE</b>	<b>ii</b>
<b>PLAGIARISM CHECK CERTIFICATE</b>	<b>iii</b>
<b>ACKNOWLEDGEMENTS</b>	<b>iv</b>
<b>LIST OF ABBREVIATIONS</b>	<b>v-vi</b>
<b>LIST OF FIGURES</b>	<b>vii</b>
<b>LIST OF TABLES</b>	<b>viii-x</b>

<b>CHAPTERS</b>	<b>TITLE</b>	<b>PAGE NUMBER</b>
<b>1</b>	<b>INTRODUCTION</b>	<b>1-17</b>
1.1	Introduction	1-5
1.2	History of MGNREGA	5-6
1.3	MGNREGA Implementation in Sikkim	6-7
1.4	Theoretical Background	8-9
1.5	Select Review of Literature	9-13
1.6	Research Gap	13
1.7	Objectives of the Study	14
1.8	Hypothesis	14
1.9	Data and Methods	15
1.9.1	Data	15
1.9.2	Methods	15

1.10	Rationale of the Study	16
1.11	Organisation of the Study	16-17
<b>2</b>	<b>SOCIO-ECONOMIC PROFILE OF NORTH-EASTERN STATES</b>	<b>18-37</b>
2.1	Introduction	18
2.2	Size of the North-Eastern states by Area	19-20
2.3	Population Size	20-24
2.4	Growth Performance of Regions in North-East India	24-26
2.5	Per Capita GSDP Growth	26-28
2.6	Poverty	28-30
2.7	Employment	30-32
2.8	Unemployment	32-33
2.9	Literacy	33-35
2.10	Health Indicators	35-36
2.11	Conclusion	36-37
<b>3</b>	<b>PERFORMANCE OF MGNREGA IN NORTH-EAST INDIA</b>	<b>38-69</b>
3.1	Background	38-39
3.2	Employment Generation	39-40
3.2.1	First Five Years of MGNREGA Implementation in the North East (2006-2011)	40-48
3.2.2	Second Five Years of MGNREGA Implementation in the North East (2011-2015)	49-57
3.3	Work Completion Rate	57-59

3.4	Poverty Alleviation	59-60
3.4.1	Delay in Payments	60-61
3.4.2	MGNREGA and Unskilled Wages	62-63
3.5	Unemployment Allowance	64-65
3.6	Grievances and Complaints	65-66
3.7	Conclusion	67-69
<b>4</b>	<b>IMPACT OF AWARENESS ON EFFICACY: EVIDENCE FROM NORTH-SIKKIM</b>	<b>70-90</b>
4.1	Introduction	70-71
4.2	MGNREGA in Sikkim	71-74
4.3	Case Study of North Sikkim: Data Methods	74
4.3.1	Primary Survey	74-75
4.3.2	Methodology	75-78
4.4	Descriptive Statistics	78-84
4.5	Awareness Level and Efficacy	84-89
4.6	Conclusion	90
<b>5</b>	<b>SUMMARY, CONCLUSIONS AND POLICY SUGGESTIONS</b>	<b>91-92</b>
5.1	Summary of the Findings	92-94
5.2	Policy Suggestions	94-96
5.3	Limitations and Scope for Further Work	96-97
	<b>REFERENCES</b>	<b>98-103</b>
	<b>APPENDIX</b>	<b>104-109</b>

# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

In 2005-06, India initiated an ambitious attempt to combat rural poverty and to create a justifiable-right to work for all households in rural India through the National Rural Employment Guarantee Employment Scheme (NREGS) renamed the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in 2009. Regarded as a very large social welfare programme, the MGNREGA promises 100 days of work per year to all rural households in India. Under this programme, work has to be made available to anyone who asks for it within 15 days of receiving an application to work, failing to which the state government has to pay an Unemployment Allowance. It has grown substantially over time to cover all districts in India<sup>1</sup> and by 2011-12, it has provided employment to 0.05 billion rural households in India at a cost of Rs 37, 303 Crores (Ministry of Rural Development, 2012). Thus the NREGA has acted as a life-line for poor people with 1 in every 3 rural households have got employment under this programme over the last 8 years (*ibid*).

Recent period has witnessed intense debate on the disproportionate outcome of this programme (Dreze, 2011 lists out various points of debates and discussion on the Scheme). There has been large inter-state variation in employment generation through MGNREGA to rural households. While states such as Rajasthan and Tripura have performed considerably well in terms of certain key indicators, namely women participation, average days of employment per person per annum, conduct of social audit etc., states such as Kerala, Maharashtra and West Bengal lagged behind (Dreze

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<sup>1</sup> Only those districts that have a hundred percent urban population are not covered by MGNREGA.

and Oldiges, 2009). On the issue of whether the employment has been successfully targeted to the poor too, there have been significant variations across Indian states. This is clearly brought out in a study covering six states by Dreze and Khera (2009), which shows that the proportion of sample workers who had completed 100 days of work was relatively higher in the states of Madhya Pradesh and Rajasthan and lower in the states of Chhattisgarh, Bihar, Uttar Pradesh and Jharkhand.

Despite the fact that some states have performed relatively well in the *provision of 100 days of employment* to rural workers, only 1/3<sup>rd</sup> of the rural people in these states have been provided with 100 days of employment through MGNREGA (Dreze and Oldiges, 2009). This trend perhaps reflects the poor implementation of the programme and purports to reduce its effectiveness in rural areas. Some studies suggest that number of workers participating in the NREGS is significantly influenced by outside job opportunities, income from other sources, family size and landholdings (Kareemulla, 2009). Another vital factor highlighted in the literature for reducing the efficacy of MGNREGA in many states is the *delay in the payment of wages* (CAG, Performance Audit of Mahatma National Rural Guarantee Employment Scheme). MGNREGA mandates that wage payment be made to beneficiaries within 15 days of work being completed. A study by Khera (2011) finds delay in wage payments to be a huge disincentive for beneficiaries to seek employment under the programme (Khera, 2011). The audit carried out by the CAG in 2006 also highlights huge delays in wage payment in 213 GPs in 16 states including Andhra Pradesh, Chhattisgarh, Jharkhand, Karnataka, Uttar Pradesh and West Bengal. Inadequate staff members and irregular flow of funds are often highlighted as the major factors driving these delays in wage payment (Ministry of Rural Development, 2012). Babu and Solanki (2014) too attribute the decline in the participation level of Scheduled Caste (SC), Scheduled



Tribe (ST) and women workers between 2008-09 and 2010 -11 to the delay in wage disbursement.

As major chunk of the workers participating in the programme are illiterate and belonging to economically backward category, the *extent of awareness* among the beneficiaries about MGNREGA and various provisions under the Act has emerged out to be another major concern affecting the proper functioning of programme in all the states. It is maintained that the two major issues identified above, namely *lack of participation of workers* and *delay in wage payment*, can be addressed to a considerable degree if there is a greater awareness about the Act among the beneficiaries. For example, a study by Samarthan (2010) highlights low awareness level among the beneficiaries as one of the vital factors affecting the effectiveness of the programme, thereby lessening the participation of workers in these activities. Another study by NFIW (2008) observes that workers' awareness on how to apply for job cards, and demand for work was reportedly very low in the study areas. Soumya Mohanty (2012), based on a survey of households of Bisra Block in Sundergarh district, finds low awareness level as one of the major deterrents of effective programme implementation. The study also finds that more than half of the beneficiaries do not hold an account either in a bank or a post office, owing to the low awareness level of beneficiaries in the group. Hence it is argued that better awareness of participants on the programme's components can significantly enhance their ability to seek redressal of their grievances (Shankar and Gaiha, 2011). In the case of Sikkim, Pradhan and Rao (2010) too find that people were not able to differentiate the NREGS with the earlier schemes due to low awareness.

Except some anecdotal evidences, there exists limited attempts to analyse the role of awareness on the performance of the programme. Against this backdrop, the primary

objective of this study is to contribute to the empirical literature by examining the role of lack of awareness on the various provisions in the Act among the beneficiaries on the efficacy of the programme.<sup>2</sup> The study will be focusing on one of the fastest growing states in the North-Eastern India, Sikkim (Raj et al. 2015). The state is an ideal case to examine this issue for a few reasons:

- (a) A large proportion of people (89 per cent) in Sikkim are still residing in the rural areas (Pradhan and Rao, 2010), for whom the programme was originally devised and implemented. Agriculture is still a major source of income to majority of people (more so for female workers) in rural areas (*ibid*). Therefore one can easily visualise the utility of the MGNREGA in helping the rural poor in securing a sustainable livelihood opportunity as well as strengthening the infrastructure base in rural areas.
- (b) The programme has been less effective in terms of provision of employment for 100 days and payment of wages in the stipulated time. Available estimates suggests that only 3 per cent of households have been provided with 100 days of work (based on the data available from **nrega.nic.in**), and there has been significant delays in the payment of wages across most districts in Sikkim, and within districts across Gram Panchayats. This has to be seen against the number of complaints received about the various aspects of the programme.<sup>3</sup> Despite the low incidence of people participation and huge delays in wage payment, absence of any grievances on the implementation of the programme

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<sup>2</sup> By efficacy, we mean the success of the programme in terms of achieving its intended objectives. In this study, we use 'efficacy' and 'effectiveness' interchangeably.

<sup>3</sup> In the year 2013-14, only one complaint has been received on the functioning of the programme. In spite of the significant delay in wage payment, not even a single complaint has been received on the issue (based on the information received from nrega.nic.in and MGNREGA, Briefing Book, Jan/2013).

raises questions about the awareness level of the beneficiaries in the programme.

Hence it is worthwhile to examine whether the low awareness level of beneficiaries in the state of Sikkim poses a serious constraint to the success of the programme, as reflected in the low incidence of workers' participation and huge delays in wage payment.

## **1.2 History of MGNREGA**

MGNREGA came into existence after almost 56 years of experience of other rural employment programmes, which include both Centrally Sponsored Schemes and those launched by State Governments. These include the National Rural Employment Programme (NREP) 1980-89; Rural Landless Employment Guarantee Programme (RLEGP) 1983-89; Jawahar Rojgar Yojana (JRY) 1989-1990; Employment Assurance Scheme (EAS) 1993-99; Jawahar Gram Samridhi Yojana (JGSY) 1999-2002; Sampoorna Grameen Rojgar Yojana (SGRY) from 2001; and National Food For Work Programme (NFFWP) since 2004. Among these, the SGRY and NFFWP have been merged with NREGA in 2005.

As is evident from Table 1.1., the NREGA came into force initially only in 200 districts of India. Though it was decided to extend the programme to other districts after five years, the programme got extended to 130 more districts in 2007 itself. The remaining districts were notified under NREGA with effect from 1 April 2008. Since 2008, MGNREGA has covered the entire country with the exception of districts that have a hundred per cent urban population. The programme soon got renamed after Mahatma Gandhi (in Oct 2<sup>nd</sup> 2009) to make the Act more reachable to the masses and

thus it became Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).<sup>4</sup>

**Table 1.1. Time-Line of MGNREGA**

<b>August 2005</b>	<b>February 2006</b>	<b>April 2007</b>	<b>April 2008</b>	<b>October 2009</b>
NREGA legalized	Came into force in 200 districts	130 more districts included	All rural districts covered	Name changed to MGNREGA

Source: www.nrega.nic.in

### **1.3. MGNREGA implementation in Sikkim**

The Government of Sikkim has devised the Rural Employment Guarantee Scheme known as the Sikkim Rural Employment Guarantee Scheme (SREGS) in 2006 in accordance with the National Act. The scheme has the same objectives as the ones envisaged in the National Act that include the provision of 100 days of wage employment to every rural household in a financial year, and also to create durable assets and strengthen the livelihood resource base of the rural (poor) people. The Scheme is implemented as a Centrally Sponsored Scheme on cost sharing basis between the Centre and the State in the ratio of 90:10.

In accord with the Central Act, the SREGS has outlined the following non-negotiable parameters:

- (i) Every registered rural household shall be provided not less than 100 days of wage employment in a financial year.
- (ii) Payment of wages shall be made at least once in a fortnight.
- (iii) Equal wages shall be paid to both men and women.
- (iv) Contractors and labour displacing machinery shall not be engaged.

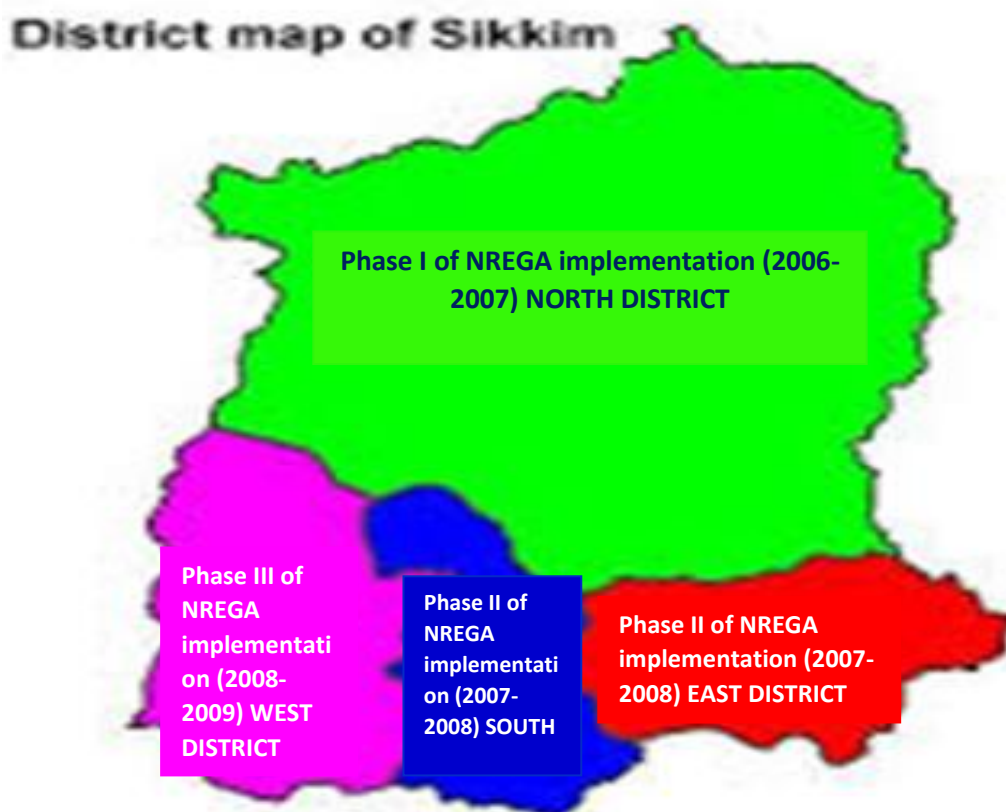
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<sup>4</sup>Soumya Mohanty. 2012. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and Tribal Livelihoods: A Case Study in Sundargarh District of Odisha.

(v) Only works approved by the Gram Panchayat (as identified in the Gram Sabha) at village level and by the Zilla Panchayat at the district level shall be taken up.

As mentioned before, the Act came into force in the state on 2<sup>nd</sup> February 2006 and was implemented in a phased manner. In the first phase, it was introduced in North District and later extended to the East and South Districts in the second phase during 2007-08. In the last phase, it was implemented in West District from 1<sup>st</sup> April, 2008 (Figure 1.1).

**Figure 1.1. Phases of NREGA implementation in Sikkim**

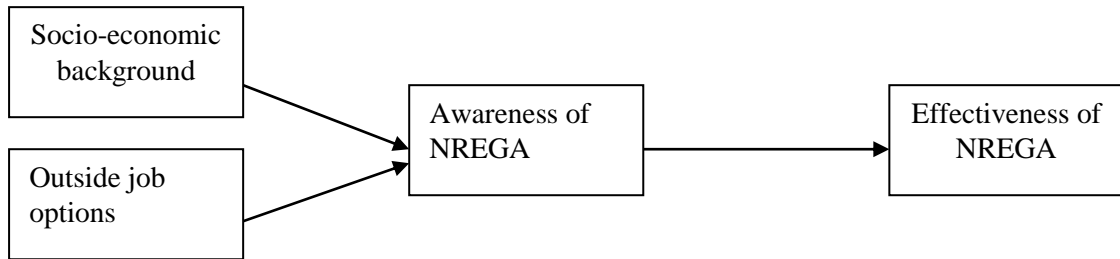


Source: [www.sikkimmap.in](http://www.sikkimmap.in)

#### **1.4. Theoretical Background**

As has been discussed above, the study intends to capture the relationship between the familiarity of the beneficiaries with the various aspects of the Act and the efficacy of the programme in terms of their decision to participate in the programme (captured through number of days of employment through MGNREGA) and wages (captured through the timely payment of wages). Though the relationship between the two is precisely not discussed in the theoretical literature, the theoretical framework which is much closer to the relationship under scrutiny is the human capital theory proposed by Schultz (1961) and Becker (1964). They have drawn attention to the significant role human capital (as proxied by education and training) plays in improving earnings. In other words, the theoretical framework developed by these two scholars has established the relationship between education and earnings of the individual, and largely this study too tries to establish a similar relationship. By and large, it can be argued that by increasing the awareness, the participants are learning more about the programme, which could have a bearing on employment (number of days employed) and income (indirectly by reducing the delay in payment of wages).

The conundrum is that the lack of awareness in turn may be a result of the socio-economic background of the participants. There are evidences to support the assertion that the awareness levels crucially depend on the socio-economic status, social capital, literacy level, occupation and the social group of beneficiaries (Babu, 2014). It is also possible that availability of better and regular job opportunities other than the ones under MGNREGA in the local labour market may explain the low work participation rate among the beneficiaries and their less inclination to understand the various provisions under the Act. In essence, the relationship under examination is tentatively captured in the following diagram:



### 1.5. Select Review of Literature

There is dearth of studies carried out to assess the performance of National Rural Employment Scheme ever since the Act came into force in the country. However, recent period has witnessed a small surge in studies on the importance of the program with respect to its implementation, effectiveness and impact on the beneficiaries. Major chunk of these studies have tried to examine the effect of MGNREGA on rural governance (Ambasta et al. 2008; Birner et al. 2010; Shariff, 2009), implementation (Khera, 2012; Mathur, 2007; Bonner et al. 2012; Carswell and Neve, 2014), growth and inclusion (Ambasta, 2010), infrastructure creation and development (AFPRO, 2009), agriculture (Imbert and Papp, 2012; Anil Bhargava, 2013) and rural labour markets (Babu, 2011; Basu, 2011), wages (Berg, 2012), migration (Bordoloi, 2011) and gender and social group (Dasgupta and Sudharshan, 2011; Babu and Rao, 2010; Dheeraja and Rao, 2010), poverty (Basu et al. 2009; Klonner and Oldiges, 2013), banks (Muralidharan et.al. 2013; Adhikari and Bhatia, 2010; Carswell and Neve, 2013; Afridi and Iverson, 2013), politics (Gupta and Mukhopadhyay, 2014; Khosla,2011; Afridi et.al, 2013) and awareness (Bhatia and Dreze, 2006).

Some of these studies that carried out an evaluation of the scheme highlight that the program is not working properly at ground level, thanks to its poor implementation. According to Bonner *et al* (2012), there is a need to strengthen the operational capacity and increase women's participation. Dheeraja *et.al* (2013) too highlights the

lesser participation of women in the program but underlines the fact that lower awareness among the women beneficiaries possibly resulting in their lower participation. Khera (2008) argues that workers were mostly dissatisfied with the work provided and there seems to be a mismatch between the work provided and what was demanded in the Gram Sabha. On a positive note, Mathur(2007) reports that the NREGA has made a positive impact on the poor, succeeded in curbing migration, successful in bringing more people into the workforce, raised the wages above the stipulated minimum wage and increased women participation. Supporting this finding, Carswell and Neve (2014) too notices that MGNREGA has produced transformations that are meaningful to those who the scheme intend to benefit.

A number of studies have also gone into examining the impact of MGNREGA on agriculture, rural labour markets and social infrastructure. While analysing the indirect impacts of the program on agricultural labour and technology markets, Bhargava (2013) finds that MGNREGA causes a shift of roughly 20 percentage points away from labour-intensive technologies toward labour-saving ones, particularly for small farmers and low-powered technologies. The study also argues that this outcome can result in a variety of long-run outcomes in technology use, labour markets, and food security. Gehrke (2013) analyses whether any changes have happened in the agricultural sector in the backdrop of MGNREGA and finds that the program helped in enhancing the risk taking capacity of farmers as there has been an increase in the cultivation of risky crops and increase in agricultural productivity. Klonner and Oldiges (2013), on the other hand, point to the significant benefits people derive by being part of the scheme, and shows that the MGNREGA has succeeded in improving the living standard of beneficiaries of MGNREGA.



Rao (2014) shows that program had a moderate impact on poverty reduction, and the latter hinges crucially on the days of participation in the scheme. Dey and Imai (2014) too highlight the positive role it played in improving household economic outcomes, such as informal credit, income, food and non-food consumption expenditure. Muralidharan *et al.* (2013) shows that the improvements in workfare program performance lead to increased private sector wages and household income.

Carswell and Neve (2013) argues that the universal, right based and women friendly nature of the policy has made it suitable for women and other vulnerable social groups. The income dependency of violence has also decreased significantly following the introduction of the public work *scheme* (Fetzer, 2013). Khosla (2011) notices that the vast majority of NREGS participants hailed from the lower social group categories (i.e. SC,ST and OBC), and argues that the program has succeeded in attracting people belonging to economically and socially backward categories to the workforce.

Adhikari and Bhatia (2010) finds that the direct transfer of wages into workers bank account is a good way for protecting the workers earnings from others, and the respondents had a fairly positive attitude towards bank accounts and exist less room for manipulation. There is also evidence that shows that Electronic Benefit Transfers (EBT) into bank account of the beneficiaries has helped the beneficiaries to receive their payment faster and reduced the extent of bribing officials (Muralidharan *et al.*, 2013). Deiniger and Liu (2013) suggest that the investment in land improvement, partly on participant's fields, emerges as a potential pathway for NREGS effects to materialize. Gupta and Mukhopadhyay (2014) shows that funds allocated to blocks are affected by political competition, and finds that wherever the INC vote share was higher, funds allocated were more.

As stated elsewhere, there exist not many studies that directly capture the role of awareness on efficacy of the program. There are a few studies that have made some passing reference to the importance of awareness for the successful implementation of the program. For instance, Malla (2014) finds that level of awareness of the respondent on the program is a crucial factor driving the success of the program in terms of participation of workers. Samarthan (2007) too highlighted the lack of awareness influencing the ability of the people to stress upon their rights. The study finds that the people were not aware that it is their right to demand for work under the scheme. The study also finds that there has been substantial delay in getting the payments for the work performed. These studies are mostly confined to the all-India level and to states other than Sikkim.

In the case of Sikkim, there are a few studies that have tried to examine issues related to MGNREGA. IIM-Shillong (2009) undertook a study of two districts in Sikkim to understand the functioning of the programme in the state. The study finds that the programme is successful in generating employment, enhancing social capital building and reducing moral hazard in community living. There were two studies that tried to examine the awareness level of beneficiaries involved in the programme. Pradhan and Rao (2010) noticed that people in rural areas are less aware about the various provisions available under the scheme and more interestingly, they were not able to differentiate the NREGS with other schemes implemented earlier. This is clearly reflected in little participation of villagers in the Gram Sabha, absence of any book keeping and non-dependence on banking facilities. Giving a different perspective, Ghosh and Karmakar (2012) observed that people were aware of the scheme but less informative about the various provisions under the Act including the facility of unemployment allowance. Panda *et.al* (2009) examine the implementation of NREGA

at the district level for the states of Meghalaya and Sikkim. The study finds that the Panchayati Raj Institutions (PRI) has a perfect integration in the state of Sikkim which is absent in Meghalaya. In Meghalaya Rural Employment Guarantee Scheme (MREGS) integrates the local culture and governance system, an innovation that has added strength to the smooth and transparent implementation of the scheme. Dandekar *et.al* (2010) tries to understand the durability and sustainability of the assets created under the MGNREGA Scheme.

There is thus less attention paid to understand how the awareness level of beneficiaries and the efficacy of programme are related. Based on this background, the present study is undertaken in the state of Sikkim.

#### **1.6. Research Gap**

The study intends to investigate whether the lack of awareness of the beneficiaries on the various components of the Act pose a barrier to the successful functioning of the programme. To capture this effect fully, one needs to examine the various factors at play in the labour markets. These factors could emerge from the socio-economic and cultural background of the beneficiaries and the outside job options available in the local labour market. There have been limited attempts to relate the lack of awareness of people involved in activities relating to MGNREGA and factors specific to socio-economic situation and local labour market conditions.

### **1.7. Objectives of the Study**

Thus it is important to examine how these factors are instrumental in explaining the efficacy of programme in the state of Sikkim. The main aim of this study is to address this obvious gap in the literature. To be specific, the objectives of the study are

- (1) To compare the progress and performance of MGNREGA across the North-Eastern states
- (2) To examine whether the awareness level of workers influence the efficacy of the programme
- (3) To investigate whether the awareness varies according to the socio-economic characteristics of the households
- (4) To analyse the role of outside job options in influencing the decision of workers to participate in MGNREGA

### **1.8. Hypotheses**

- (1) Greater awareness reduces delays in payment and encourages greater participation by workers.
- (2) The outside employment opportunities a prospective worker encounters influence his decision to participate in the programme.
- (3) Extent of awareness considerably varies depending on the socio-economic and cultural background of the participants.

## **1.9. Data and Methods**

### **1.9.1. Data**

The study is based on both primary and secondary data. The secondary data on NREGA are obtained largely from the official website of the Mahatma Gandhi National Rural employment Guarantee Act 2005 ([www.nrega.nic.in](http://www.nrega.nic.in)) of the Ministry of Rural Development, Government of India, and are collected for the period, 2006-2015. The annual reports of NREGA were also consulted for information that are not available in the website. Data related to Chapter 2 are obtained from different sources that include publications of Reserve Bank of India (RBI), National Account Statistics, reports of Labour Bureau and also from the website [Indiastat.in](http://Indiastat.in). To capture the role of awareness on efficacy, one needs to have information on variables that can best capture the level of awareness and efficacy. As information on variables that can best represent these two dimensions is not available from the secondary sources, a fieldwork among the selected households in North District of Sikkim is carried out. The details about the sampling procedure are presented in Chapter 4, where the primary survey data is used.

### **1.9.2. Methods**

The empirical analysis is based on simple descriptive statistics like percentages, ratios, growth rates represented through tables and charts for an easy understanding of the performance of the states in various socio-economic indicators and MGNREGA. Econometric techniques are applied to understand the role of awareness on effectiveness indicators. To construct awareness, an index using four indicators have been constructed. The methods are discussed in detail in respective chapters.

### **1.10. Rationale of the Study**

The NREGA is India's most important anti-poverty program in recent years, and has the potential to provide much needed income support to poor rural households. However, there is a growing realisation that employment outcomes in the NREGA has not been high as expected in majority of the states. There is significant concern both at the Ministry of Rural Development and among civil society on the poor NREGA outcomes and considerable interest in understanding the bottlenecks to NREGA implementation in states. The CAG report on the MGNREGA identifies delayed wage payment as one key bottleneck. There is some evidence to show that increasing the awareness can play a greater role in improving the outcomes of MGNREGA. This study will identify how important is awareness in explaining the effective implementation of MGNREGA in Sikkim. An employment guarantee programme without eliminating institutional bottlenecks (for example, payment delay) may unlikely to succeed as an inclusive development strategy. This point is academically and also practically very relevant in the Development Economics literature.

### **1.11. Organisation of the Study**

The thesis is organised in five chapters. The first chapter presents the introduction of the study. In Chapter 2, we present a comparative analysis of north-eastern states using selected socio-economic indicators. Chapter 3 presents an overview on the performance of MGNREGA in the north-eastern states. The attempt here is to place in context the performance of MGNREGA with regard to the north-eastern states and Sikkim. As there exists possibilities of wide inter-state variation in performance, the exercise in this chapter would set the stage for addressing our study objectives in the

context of Sikkim. As the endeavour is to understand the correlates of efficacy, Chapter 4 explores the role of lack of awareness of beneficiaries on the successful functioning of the programme. The study comes to a close with a set of concluding observations in Chapter 5.

## CHAPTER 2

### SOCIO-ECONOMIC PROFILE OF NORTH-EASTERN STATES

#### 2.1 Introduction

This chapter aimed at analysing the disparities in socio-economic development in the north-eastern region, a region located in the midst of the East Himalayan Region. The North-East is surrounded by Meghalaya, Manipur, Nagaland, Mizoram, Tripura with Assam situated at the centre. Arunachal Pradesh situates to its north and Sikkim a bit away in the North West flanking China and Bhutan. The countries, Bangladesh and Myanmar, situate to its southwest and east. Though unique in most respects, these states seem to share similar economic and geographical attributes. In this chapter, the main objective is to carry out a critical appraisal of the key social and economic indicators of the eight north-eastern states. Before examining the performance of MGNREGA in Sikkim in comparison with other north-eastern states, it is pertinent to understand how the state of Sikkim has performed in various socio-economic indicators vis-à-vis other states in the region. This is important as it is argued that a region with better social and economic development is better able to implement NREGA, as higher level of development might reflect the ability of its bureaucracy to manage intricate programs such as NREGA effectively, thereby resulting in better performance (Raj and Singha, 2016). Taking cognizance of it, this chapter focuses on the comparative socio-economic development of Sikkim vis-à-vis the other north-eastern states in terms of selected socio-economic indicators.



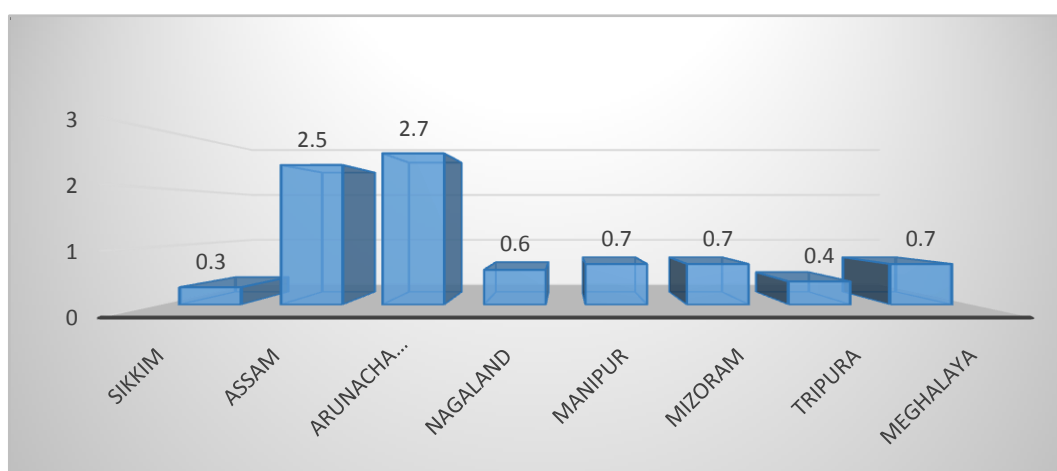
## 2.2 Size of the North-Eastern states by Area

**Table 2.1 Area of North-Eastern states in comparison with India**

Administrative Units	Area (km <sup>2</sup> )	Area as % of the area of India
Arunachal Pradesh	83743	2.733
Assam	78438	2.559
Manipur	22327	0.729
Meghalaya	22429	0.732
Mizoram	21081	0.688
Nagaland	16579	0.541
Sikkim	7096	0.232
Tripura	10486	0.343
<b>N E region</b>	<b>262179</b>	<b>8.557</b>
<b>India</b>	<b>30,65,027</b>	<b>100</b>

Source: Indiatat.in

**Figure 2.1. Geographical area of North-East India (in per cent)**



Source: estimates based on the table 2.1

India has a total of 30, 65,027 square kilometre area, to which the North-Eastern region (NER) covers an area of 2.62 lakh square kilometre. In terms of share, the NER accounts for 8.56 per cent of India's total geographical area (Table 2.1). As is evident from Figure 2.1, most of the north eastern states are small in area. Sikkim is the smallest among them comprising of just 0.3 per cent of the total Indian

geographical area. Assam and Arunachal Pradesh are the bigger states in the NER accounting for 2.5 and 2.7 per cent of the total geographical area respectively. While Manipur, Mizoram and Meghalaya are almost of equal size with 0.7 per cent of India's total geographical area, Tripura lying just above Sikkim account for 0.4 per cent of total area. In the NER, Sikkim account for 2.71 per cent of the total area covered by the North-East region (Table 2.2).

**Table 2.2 Area Occupied by Sikkim in North-East India**

<b>State</b>	<b>Area of the states (km<sup>2</sup>)</b>	<b>Area of Sikkim in % of the area of the North-East</b>
North-East region	262179	100
Sikkim	7096	2.71

Source: Indiatat.in

### **2.3 Population Size**

Using the Census data for 1991, 2001 and 2011, the size, growth and density of population across the states in the NER is examined. The size and density of population for the north-eastern states for 1991, 2001 and 2011 are presented in Table 2.3, Table 2.4 and Table 2.5 respectively. As per 2011 Census, the North-East India hosts a population of 45.48 million, increased from 31.95 million in 1991. With a total population of 45.48 million, it accounts for about 3.8 per cent of India's total population. Despite the increase in population between 1991 and 2001, the region's share in country's total population remain unchanged at 3.8 per cent. Among the north-eastern states, Assam has the largest population size and Sikkim has the lowest throughout the period, 2001-2011. While Assam contributed on average 2.7 per cent to the total population of India, Sikkim's share was a meagre 0.05 per cent. In terms of population density too Assam stood first, and the state has witnessed considerable increase in density between 1991 and 2011. The density was the lowest in Mizoram

throughout the study period. Available evidence, however, points to significant increase in population density in majority of the states in the NER.

**Table 2.3 Population of North-Eastern states in comparison with India (1991)**

<b>Administrative Units</b>	<b>Population 1991</b>	<b>As % of the population of India</b>	<b>Density/km<sup>2</sup> 1991</b>
Arunachal Pradesh	864558	0.104	10
Assam	22414322	2.676	286
Manipur	1837149	0.220	82
Meghalaya	1774778	0.212	79
Mizoram	689756	0.083	33
Nagaland	1209546	0.145	73
Sikkim	406457	0.049	57
Tripura	2757205	0.330	263
<b>N E region</b>	<b>31953771</b>	<b>3.819</b>	<b>122</b>
<b>India</b>	<b>837776203</b>	<b>100</b>	<b>267</b>

Source: Census of India, 1991

**Table 2.4 Population of North-Eastern states in comparison with India (2001)**

<b>Administrative Units</b>	<b>Population 2001</b>	<b>As % of the population of India</b>	<b>Density/km<sup>2</sup> 2001</b>
Arunachal Pradesh	1097968	0.107	13
Assam	26655528	2.592	340
Manipur	2166788	0.211	103
Meghalaya	2318822	0.226	103
Mizoram	888573	0.087	42
Nagaland	1990036	0.194	120
Sikkim	540851	0.053	76
Tripura	3199203	0.312	305
<b>N E region</b>	<b>38857769</b>	<b>3.782</b>	<b>148</b>
<b>India</b>	<b>1028610328</b>	<b>100</b>	<b>325</b>

Source: Census of India, 2001

**Table 2.5 Population of North-Eastern states in comparison with India (2011)**

<b>Administrative Units</b>	<b>Population 2011</b>	<b>As % of the population of India</b>	<b>Density/km<sup>2</sup> 2011</b>
Arunachal Pradesh	1383727	0.115	17
Assam	31205576	2.578	397
Manipur	2570390	0.213	122
Meghalaya	2966889	0.246	132
Mizoram	1097206	0.091	52
Nagaland	1978502	0.164	119
Sikkim	610577	0.051	86
Tripura	3673917	0.304	350
<b>N E region</b>	<b>45486784</b>	<b>3.762</b>	<b>174</b>
<b>India</b>	<b>1210569573</b>	<b>100</b>	<b>382</b>

Source: Census of India, 2011

Within the north-east region, Sikkim's share to the total population has registered a marginal increase between 1991 and 2011 (Table 2.6). The state's contribution to the total population in NER 1.28 per cent in 1991, which has increased to 1.35 in 2011. If we consider the share in 2001, there was a marginal decline between 2001 and 2011.

The states in the region vary widely with respect to the growth of population. The compound annual growth rate of population displayed in Table 2.7 reveals that there exists considerable differences in the rate at which population grew in these states. The population size expanded at a rate of 2.75 per cent per annum in Meghalaya, closely followed by Nagaland (2.63 percent per annum), Arunachal Pradesh (2.51 percent per annum) and Mizoram (2.48 percent per annum). The rate of growth of population was relatively lower in Tripura (1.53 percent per annum), Manipur (1.79 percent per annum) and Assam (1.76 percent per annum). Sikkim, on the other hand, recorded a moderate growth rate of 2.17 per cent per annum over the period, 1991-2011.

**Table 2.6 Population Size of Sikkim**

Census years	State	Population of the region	Population of Sikkim as % of the NE region
1991	North-East region	31953771	100
	Sikkim	406457	1.28
2001	North-East region	38857769	100
	Sikkim	540851	1.40
2011	North-East region	45486784	100
	Sikkim	610577	1.35

Source: Census of India, 1991, 2001 and 2011.

**Table 2.7 State-wise Growth of Population, 1991 - 2011**

Year	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
1991	864558	22414322	1837149	1774778	689756	1209546	406457	2757205
2001	1097968	26655528	2293896	2318822	888573	1990036	540851	3199203
2011	1383727	31205576	2570390	2966889	1097206	1978502	610577	3673917
CAGR <sup>5</sup> (1991-2001)	2.51	1.76	1.79	2.75	2.48	2.63	2.17	1.53

Source: Author's estimates based on Census of India.

It is also important to note that there are wide differences in sex ratio across the north-eastern states. Figure 2.2 presents state-wise figures on the sex ratio between the years 1991 and 2001. The states such as Manipur, Meghalaya and Mizoram reported high sex ratios with some tendency to increase over time, while Sikkim registered the lowest sex ratio (890 females per 1000 males) among all states in the north-eastern region.

<sup>5</sup> formula for CAGR calculation  $[(\text{End Value}/\text{Start Value})^{1/(\text{Periods}-1)}]-1$

**Figure 2.2 Comparison of Sex Ratio across North-Eastern States**



Source: Indiatat.in

#### **2.4 Growth Performance of Regions in North-East India**

The growth performance of North-Eastern states over the period, 1981-2012 is attempted in this subsection. In order to understand the consistency in growth performance, the growth performance of these states is examined for three sub-periods, 1981-1991 (henceforth 80s), 1991-2001 (henceforth, 90s) and 2001-2012 (henceforth, 2000s). Two indicators, namely Gross State Domestic Product (GSDP) and Per Capita GSDP, arrived at by dividing the GSDP by the population size, have been employed to capture the growth performance. As the values of gross state domestic product were expressed in different bases, they have been arithmetically brought to a common base year (2004-05) so as to make the comparison over time possible.

The annual average growth rates of GSDP in the north-eastern states over the period, 1981-2012 and its three sub-periods are presented in Table 2.8. A comparison of the average growth of combined GSDP of all seven states in the 80s, 90s and 2000s reveals a slowdown in growth during the 90s and a sharp increase for the 2000s. Our analysis clearly show considerable disparity in growth performance across states in the 80s and 90s, with some states registering faster growth than others, but the degree of dispersion in growth rates declined drastically in the 2000s as is evident from the estimates of coefficient of variation (CV). In the 80s, the growth rate varies from a low of 3.4 per cent per year for Meghalaya to a high of 6.2 per cent in Arunachal Pradesh. The growth rate ranged between a low of 0.5 per cent per year for Arunachal Pradesh and a high of 5.0 per cent per year for Sikkim in the 90s. For the 2000s, growth rates ranged between a low of 6.1 per cent per year for Arunachal Pradesh and a high of 6.7 per cent per year for Sikkim, Tripura and Nagaland.

Our results yield that GSDP growth had slowed down between the 80s and 90s in two out of seven states and increased in five states. These five states are Meghalaya, Assam, Nagaland, Tripura and Manipur. On the other hand, the 2000s witnessed significant expansion in GSDP in all the states. The GSDP has recorded a significantly higher growth rates in 2000s as compared to the 1990s in all the states. In spite of the outstanding performance of these states in terms of GSDP in the 2000s, the growth rates were lower than the average for the 15 major states in India (Table 2.8). Overall, the preceding discussion thus suggests that growth in these states have substantially improved in the recent period (2000s) as compared to the previous periods (80s and 90s). Alongside, our analysis also clearly suggests that there has been significant reduction in inter-state variation in growth rates in the 2000s.

**Table 2.8 Rate of Growth of Gross State Domestic Product (Per cent per year)**

<b>States</b>	<b>1981-1991</b>	<b>1991-2001</b>	<b>2001-2012</b>	<b>1981-2012</b>
Arunachal Pradesh	6.2	0.5	6.1	3.6
Meghalaya	3.4	5.3	6.2	4.7
Sikkim	4.1	5.0	6.7	5.3
Assam	4.5	3.0	6.4	4.5
Nagaland	5.0	4.9	6.7	6.1
Tripura	3.8	4.8	6.7	5.2
Manipur	3.6	4.7	6.2	3.6
<i>Average for 7 states</i>	<i>4.4</i>	<i>4.0</i>	<i>6.4</i>	<i>4.7</i>
<i>Average for 15 majors States</i>	<i>4.7</i>	<i>4.7</i>	<i>7.6</i>	<i>5.7</i>
<b>Coefficient of Variation</b>	<b>0.22</b>	<b>0.43</b>	<b>0.04</b>	<b>0.19</b>

**Note:** We exclude Mizoram from our analysis due to the lack of data for the period under consideration.

Growth rates reported are compound annual growth rates.

**Source:** CSO, EPWRF and authors' calculations.

## **2.5 Per Capita GSDP Growth**

For a better analysis of regional disparities, we should analyse not merely aggregate growth rate but also the growth of per capita GSDP. This is attempted in this subsection. Table 2.9 presents the growth of per capita GSDP in the seven states for the period 1981 to 2012 and the sub-periods. Besides growth rates, the table also reports the level of per capita GSDP for the beginning and ending year of each sub-period. All states have recorded acceleration in per capita income during the period under study. In 1981, the per capita GSDP was the lowest in Sikkim (Rs. 7516) and the highest in Nagaland (Rs. 19, 091); 2.5 times higher than that of Sikkim. Interestingly, Sikkim has witnessed considerable increase in its per capita income in the last three



decades to reach on the top among the seven states with a per capita income of Rs.68,826.

Turning to growth rates, we find considerable variation across the states especially in the 80s and 90s. If we go by the coefficient of variation reported in the Table 2.9, it may be seen that the regional disparities in standard of living, as measured by per capita GSDP at constant prices, have barely changed in the 1980s and 1990s. In the 1980s, Assam recorded the lowest per capita GSDP growth at 1.3 per cent per annum and Sikkim the highest at 8.3 per cent. Three states namely Sikkim, Arunachal Pradesh and Nagaland have recorded growth rates significantly higher than the average annual growth rate for the country as a whole. There has been a slowdown in the average growth of per capita income in the 1990s. In this period, the per capita income grew by 2.6 per cent per annum for the North-east India. Growth rate in the 1990s varied from a low of 0.5 per cent in Assam to 5.3 per cent in Tripura. As is evident from the value of CV, there has been a considerable decline in inter-regional disparity in growth of per capita income in the 2000s. In the period 2001-2012, the lowest growth rate was reported by Manipur at 4.0 per cent per annum and the highest growth by Sikkim at 7.6 per cent per annum. Sikkim, Tripura and Meghalaya are the states that registered growth rates more than the national average during this period. The growth performance of Sikkim and Tripura is particularly noteworthy, as their growth rates jumped from 4.1 per cent and 5.3 per cent respectively in the 90s to 7.6 per cent and 6.7 per cent respectively in the 2000s. A remarkable feature of the growth performance during the 2000s was the strong performance of the hitherto laggard states. Assam, Meghalaya and Manipur recorded some of the significant improvements in per capita income between 2001 and 2012. As a result, average

growth for per capita GSDP has increased to 5.4 per cent per annum in the 2000s from 2.6 per cent per annum in the 90s.

**Table 2.9 Annual Rates of Growth of Per Capita Gross State Domestic Product (per cent per year)**

States	Per Capita GSDP Level				Per Capita GSDP Growth			
	1981	1991	2001	2012	1981-1990	1991-2000	2001-2012	1981-2012
Arunachal Pradesh	9317	15971	21431	40556	4.7	2.3	5.6	4.4
Meghalaya	13019	17400	22523	42003	2.0	2.6	6.0	3.8
Sikkim	7516	16484	24458	68826	8.3	4.1	7.6	6.2
Assam	12946	15638	16762	26037	1.3	0.5	4.1	1.8
Nagaland	19091	26485	29885	46546	3.5	0.8	4.1	2.2
Tripura	9359	12071	20018	42968	2.3	5.3	6.7	5.4
Manipur	11532	14527	17464	26692	2.4	2.4	4.0	2.6
<i>Average for 7 states</i>	<i>11826</i>	<i>16939</i>	<i>21792</i>	<i>44052</i>	<i>3.5</i>	<i>2.6</i>	<i>5.4</i>	<i>3.8</i>
<i>All India Growth Rate</i>	<i>13514</i>	<i>17341</i>	<i>23244</i>	<i>45177</i>	<i>2.5</i>	<i>2.8</i>	<i>6.0</i>	<i>3.8</i>
<b>Coefficient of Variation</b>	<b>0.32</b>	<b>0.27</b>	<b>0.21</b>	<b>0.44</b>	<b>0.68</b>	<b>0.66</b>	<b>0.26</b>	<b>0.44</b>

**Note:** Growth rates reported are compound annual growth rates.

**Source:** CSO, EPWRF and authors' calculations.

## 2.6 Poverty

Poverty here implies the percentage of people living below the poverty line, the indicator proposed by the Tendulkar Committee to compute state-level rural and urban poverty ratios. Accordingly, the rate of poverty is presented in Table 2.10 for the periods, 2004-05 and 2011-12. During the year 2004-05, the percentage of population living below poverty line in India was 37.2 per cent. Except for two states, Tripura and Manipur, all states in the North-Eastern region had poverty rates lower than the average for the country as a whole during the same period. In Manipur and

Tripura, the percentage of people below the poverty line were 38 per cent and 40.6 per cent respectively. Nagaland had the least percentage of population below the poverty line at 9 per cent. In Arunachal Pradesh, Assam and Sikkim, the poverty rates during 2004-05 hovered around 30 to 35 per cent.

**Table 2.10 Percentage of population Below Poverty Line in North-Eastern states, 2004-05 – 2011-12**

States	Percentage of population below poverty line					
	2004-2005			2011-1012		
	Rural	Urban	Combined	Rural	Urban	Combined
<b>Arunachal Pradesh</b>	33.6	23.5	31.1	38.93	20.33	34.67
<b>Assam</b>	36.4	21.8	34.4	33.89	20.49	31.98
<b>Manipur</b>	39.3	34.5	38	38.8	32.59	36.89
<b>Meghalaya</b>	14	24.7	16.1	12.53	9.26	11.87
<b>Mizoram</b>	23	7.9	15.3	35.43	6.36	20.4
<b>Nagaland</b>	10	4.3	9	19.93	16.48	18.88
<b>Sikkim</b>	31.8	25.9	31.1	9.85	3.66	8.19
<b>Tripura</b>	44.5	22.5	40.6	16.53	7.42	14.05
<b>Average for NER</b>	29.1	20.6	27.0	25.7	14.6	22.1
<b>India</b>	41.8	25.7	37.2	25.7	13.7	21.9

Source: Indiatstat.in

To explain this further, the Compound Annual Growth Rate (CAGR) of poverty for India and the North-Eastern states is computed. These growth rates are presented Table 2.11. The minus (-) sign in the table corresponds to the fall or decrease in average percentage of poverty. Sikkim and Tripura are among the best performing states in the North-Eastern region in terms of poverty reduction. While percentage decline in poverty was 15.37 for Sikkim, it was 12.43 for Tripura. These are also the states which have witnessed a poverty decline better than the all India average of 6.41 per cent. However, Nagaland, Mizoram and Arunachal Pradesh have registered an increase in percentage of people below poverty line over the seven year period, 2004-05 – 2011-12. Available evidence also shows that Sikkim is one among the best

performing states in India in terms of poverty reduction. It is also reported to be one among the states with least proportion of people living below poverty line, according to the planning commission. The estimates by the planning commission shows that Goa (5.09 per cent), Kerala (7.05 per cent), Himachal Pradesh (8.06 per cent), Sikkim (8.19 per cent), Punjab (8.26 per cent) and Andhra Pradesh (9.20 per cent) are the states with the least proportion of poor in their population.

**Table 2.11 Changes in BPL Population, 2004-05 and 2011-12**

States	Percentage of population below poverty line		Compound Annual Growth Rate of below poverty line (2004-2012)
	2004-2005	2011-1012	
	Combined	Combined	
<b>Arunachal Pradesh</b>	31.1	34.67	1.37
<b>Assam</b>	34.4	31.98	-0.91
<b>Manipur</b>	38	36.89	-0.37
<b>Meghalaya</b>	16.1	11.87	-3.74
<b>Mizoram</b>	15.3	20.4	3.67
<b>Nagaland</b>	9	18.88	9.71
<b>Sikkim</b>	31.1	8.19	-15.37
<b>Tripura</b>	40.6	14.05	-12.43
<b>India</b>	37.2	21.9	-6.41

Source: Indiatat.in

## 2.7 Employment

Now we present a state-wise comparison of employment in the organised sector for the period, 2010-2012. As the employment figures for Arunachal Pradesh and Sikkim are not available with the Employment Market Programme of Ministry of Labour and Employment, we exclude them from our comparative analysis. With the available estimates, we compare the employment of the North-Eastern states with the rest of India. When we look at the employment figures for the organised sector presented in Table 2.12, we find that the north eastern states are placed much below the states in

the northern, central, eastern, western and southern states of the country in terms of employment generation.

**Table 2.12 Employment in the Organised Sector, 2010-2012**

<b>Zone-wise Employment in Organised Sector in India</b>			
<b>(As on 31<sup>st</sup> March, 2010 to 2012)</b>			
<b>Zone</b>	<b>Employment (In lakh) As on 31st March</b>		
	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Northern:</b> Chandigarh, Delhi, Punjab Haryana, Himachal Pradesh, Jammu & Kashmir	43.2	44	44.59
& Rajasthan			
<b>Central:</b> Madhya Pradesh, Chhattisgarh, Uttar Pradesh & Uttarakhand	37.64	38.02	38.17
<b>North Eastern:</b> Assam, Manipur, Meghalaya, Nagaland, Tripura & Mizoram	14.98	14.81	35.6
<b>Eastern:</b> Bihar, Jharkhand, Orissa & West Bengal	46.85	45.12	46.37
<b>Western:</b> Goa, Gujarat, Maharashtra and Daman & Diu	63.92	69.37	73.17
<b>Southern:</b> Andhra Pradesh, Karnataka, Kerala, Pondicherry & Tamil Nadu	80.13	78.3	78.07
Andaman and Nicobar Islands	0.38	0.38	0.38
<b>India</b>	<b>287.08</b>	<b>289.99</b>	<b>295.79</b>

Source: Indiatat.in

Further when we attempt a comparison of employment in the public sector with that in the private sector, we find that most of the employees working in the formal sector work in the public sector, mostly in the government sector (Table 2.13). Between 2010 and 2012, there was an increase in employment in the private sector in most of

the states in the north eastern region. Notably, in Tripura, there is a drastic increase in jobs in the private sector; from 0.06 in 2011 to 5.8 in 2012.

**Table 2.13 Employment in the Organised Sector in North-East, 2010-2012**

<b>Employment in Organised sector in North-East India</b>									
<b>(In Lakh)</b>									
<b>(As on 31<sup>st</sup> March, 2010 to 2012)</b>									
<b>States</b>	<b>As on 31.03.2010</b>			<b>As on 31.03.2011</b>			<b>As on 31.03.2012</b>		
	<b>Public Sector</b>	<b>Private Sector</b>	<b>Total</b>	<b>Public Sector</b>	<b>Private Sector</b>	<b>Total</b>	<b>Public Sector</b>	<b>Private Sector</b>	<b>Total</b>
Assam	5.31	5.83	11.14	5.34	5.83	11.17	5.38	5.82	11.2
Manipur	0.76	0.03	0.79	0.76	0.03	0.79	0.76	0.03	0.79
Meghalaya	0.37	0.06	0.43	0.47	0.05	0.52	0.56	0.07	0.63
Mizoram	0.4	0.01	0.41	0.1	0	0.1	0.12	0.01	0.13
Nagaland	0.74	0.04	0.78	0.73	0.05	0.78	0.74	0.05	0.79
Tripura	1.37	0.04	1.41	1.38	0.06	1.44	1.45	5.8	7.25
<b>North-East</b>	<b>8.95</b>	<b>6.01</b>	<b>14.98</b>	<b>8.78</b>	<b>6.02</b>	<b>14.81</b>	<b>9.01</b>	<b>11.78</b>	<b>35.6</b>

Source: Indiatstat.in

## **2.8 Unemployment**

The significant growth performance of states in the NER takes us to the issue of generation of gainful employment opportunities to the people residing in these states. This is what being examined here. To be specific, we examine here whether the higher growth rates experienced by these regions has led to reduction of unemployment in NER. Table 2.14 reports the incidence of unemployment by gender and place of residence. First, it is clearly evident from the table that the unemployment rate in NER is considerably higher than the national average. This seems to be the case for both rural and urban areas and for both male and female workers. In line with trend observed for the country as a whole, urban areas have significantly higher incidence of unemployment. Our estimates suggest that the magnitude of unemployment in urban areas has increased from 7.5 in 1993–94 to 9.0 per cent in 2004–05 in NER. Third, as expected, the gender-wise break-up shows that,

in majority of the states, female unemployment rates are higher than that of male unemployment rates. Nagaland and Sikkim are the only exceptions where male unemployment rates are higher than female unemployment rates. Notably, in the case of Sikkim, the unemployment rates among women are considerably lower than that of male workers.

**Table 2.14 Unemployment Rate: A State-wise Comparison**

States	Rural		Urban		Total		Male		Female	
	1993-94	2004-05	1993-94	2004-05	1993-94	2004-05	1993-94	2004-05	1993-94	2004-05
Arunachal Pradesh	1.1	0.9	2.5	1.6	1.3	1.0	1.7	1.1	0.6	0.8
Assam	8.1	4.1	9.8	8.4	8.3	4.6	6.2	3.6	15.5	7.7
Manipur	1.6	1.7	5.0	6.3	2.4	2.6	2.8	2.7	1.8	2.4
Meghalaya	0.2	0.3	1.8	4.0	0.4	0.9	0.5	0.7	0.3	1.1
Mizoram	1.2	0.5	0.5	2.0	0.9	1.1	1.1	1.1	0.6	1.1
Nagaland	1.5	4.7	6.9	7.8	2.3	5.1	2.9	5.8	0.6	4.3
Sikkim	1.4	2.6	2.1	3.7	1.4	2.8	0.7	3.2	4.1	1.9
Tripura	2.8	13.9	9.2	28.2	3.9	16.7	2.2	11.0	10.4	41.9
<b>NER</b>	6.0	4.2	7.5	9.0	6.2	4.9	4.9	4.0	10.1	7.1
<b>India</b>	1.8	2.5	5.3	5.4	2.6	3.2	2.7	2.8	2.4	4.1

Source: NSS Employment-Unemployment Surveys.

## 2.9 Literacy

During the 60 year period under examination, 1951-2011, the north-eastern states have shown a significant improvement in the literacy rates (Table 2.15). In 2011, Mizoram recorded the highest literacy (91 per cent) followed by Tripura (87 per cent), Sikkim (81 per cent), Nagaland (80 per cent), Manipur (79 per cent), Meghalaya (74 per cent) and Assam (72 per cent). The literacy rate was lowest in the state of Arunachal Pradesh (65 per cent). When we look at the pace of improvement in

literacy, it can be seen that Sikkim has recorded the fastest improvement among the north-eastern states.

**Table 2.15 Literacy Rates in North-East India, 1951-2011**

Year	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	India
1951	0	18.53	12.57	0	31.14	10.52	0	0	18.33
1961	47.93	32.98	0	0	0	20.43	14.15	0	28.30
1971	13.26	34.6	38.47	35.06	0	31.32	20.22	36.19	34.45
1981	24.24	0	47.45	39.95	69.66	48.2	39.58	47.64	41.43
1991	41.59	52.89	59.89	49.1	82.27	61.65	56.94	60.44	52.22
2001	54.34	63.25	70.53	62.56	88.8	66.59	68.81	73.19	64.84
2011	65.38	72.19	79.21	74.43	91.33	79.55	81.42	87.22	72.99
<b>CAGR</b>	<b>0.64</b>	<b>2.34</b>	<b>3.17</b>	<b>1.95</b>	<b>1.85</b>	<b>3.49</b>	<b>3.64</b>	<b>2.29</b>	<b>2.37</b>

Source: Indiatat.in

## 2.10 Health Indicators

In the case of health indicators too, there exist considerable disparity across the states in north-east India (Table 2.16). Manipur and Nagaland are the better performing states in terms of these indicators, while Assam and Meghalaya seem to be languishing at the bottom. The crude death rate (CDR) is the lowest in Nagaland, closely followed by Manipur. Assam has the highest CDR followed by Meghalaya. In infant mortality rate, Manipur has the lowest and Assam has the highest. The state of Sikkim shows a moderate performance in terms of these indicators.



**Table 2.16: Health Indicators: A Comparison**

States	Crude Birth Rates			Crude Death Rates			Infant Mortality Rate by Sex		
	Total	Rural	Urban	Total	Rural	Urban	Total	Male	Female
Arunachal Pradesh	19.8	21.4	14.2	5.8	6.8	2.5	32	33	31
Assam	22.8	24	15.5	8	8.4	5.6	55	55	56
Manipur	14.4	14.2	15	4.1	4.1	4.2	11	8	15
Meghalaya	24.1	26.2	14.6	7.8	8.3	5.5	52	52	52
Mizoram	16.6	20.6	12.6	4.4	5.4	3.4	34	31	37
Nagaland	16.1	16.3	15.5	3.3	3.4	2.9	21	15	26
Sikkim	17.6	17.7	16.6	5.6	5.9	3.5	26	23	30
Tripura	14.3	15.1	11	5	4.9	5.4	29	29	29
<b>India</b>	<b>21.8</b>	<b>23.3</b>	<b>17.6</b>	<b>7.1</b>	<b>7.6</b>	<b>5.7</b>	<b>44</b>	<b>43</b>	<b>46</b>

Source: Census of India, 2011.

### 2.11 Conclusion:

In this chapter, we have compared the performance of North-Eastern states by focusing on selected socio-economic indicators. Such a comparative analysis would help us to gain some insights on the development profile of states in the region. We anticipate that states with higher development levels to be better able to implement MGNREGA, since a higher level of development might indicate the ability of a state bureaucracy to run complex programs effectively.

Sikkim though smallest (in terms of area and size of the population) in the region seems to have performed better in majority of selected socio-economic indicators. The state has witnessed considerable increase in its per capita income in the last three decades to reach on the top among the North-eastern states with a per capita income of Rs.68, 826, and also has recorded growth rates significantly higher than the national average. The significant growth the state has experienced has also helped to make a marked dent on poverty. Available evidence shows that Sikkim is one among the best performing states not only in NER but also in India, in terms of poverty

reduction. In terms of unemployment too, the state is placed in a much better position, and the unemployment rates among women are considerably lower than that of male workers. Thus the analysis carried out in the Chapter points to the clear edge the state of Sikkim had in many socio-economic indicators over other states in the NER. In this context, it would be interesting to see whether the higher development levels of the state has resulted in better implementation of MGNREGA. This is attempted in the next chapter.

## CHAPTER 3

### PERFORMANCE OF MGNREGA IN NORTH-EAST INDIA

#### 3.1 Background

India has a rich history and experience in diverse social protection programs (See Vij, 2013 for the details about the various programmes). Majority of these programmes were aimed at providing income support to those who face numerous forms of vulnerabilities from loss or fluctuations in income or assets (*ibid*). Most of these initiatives were only partially successful due to weak target and execution mechanisms. In addition, there are delays and inefficiencies, ambiguous procedures, pilferages and pervasive corruption (Dreze 1990; Dev 2006; Khera 2011). In short, programmes aimed at resolving these issues are numerous, but many of them failed to make a marked impact on the lives of the deprived and socially and economically backward sections in the society. Hence, it was felt that a stronger programme that can tackle these issues and provide these vulnerable groups with reasonable and regular income support was needed. The enactment of MGNREGA in 2005 is an initiative in this direction, aimed to address these shortcomings and structural inequalities.

The MGNREGA recognises employment as a legal right. Under the Act, people reserves the right to get employed on local public works, at a statutory minimum wage, within 15 days of the date of demand (Dreze, 2007). It also has got a provision of generating at least one hundred days of employment in a year to every household who agree to perform unskilled manual work. Under the Act, the government is also obliged to guarantee jobs to those who have demanded it within 15 days, failing which unemployment allowance should be paid to them. The programme has now

covered all the states and union territories in the country. During its first phase in 2006-07, the programme was implemented in 200 districts and extended to 330 additional districts in second phase in 2007-08 (Vij, 2013). All remaining districts were covered in April 1, 2008. While earlier wage employment programmes were allocation-based, the MGNREGA is demand-driven. This implies that the resource transfer from the Centre to the states will be done based on the demand for employment in each of the states. This gives an added incentive to states to leverage the Act to meet the employment needs of the poor.

In this chapter, an attempt is made to understand the progress and performance of MGNREGA in the North-Eastern states, by undertaking an analysis of key performance indicators of MGNREGA. This would help us to understand whether there exists significant differences in performance across the states in North-Eastern region, as has been observed for larger states in India. Our purpose is also to see how the state of Sikkim has performed in comparison with other states, given that the former has done relatively well in various socio-economic parameters. To enable the comparison, a number of indicators have been identified, which include the following:

- (a) Employment Generation
- (b) Livelihood security
- (c) Empowerment
- (d) Unemployment Allowance

### **3.2. Employment Generation**

The main objective of the MGNREGA is ‘to provide for the enhancement of the livelihood security of the households in rural areas by providing at least 100 days of guaranteed wage employment’ in a year. This can be then used as a numerical

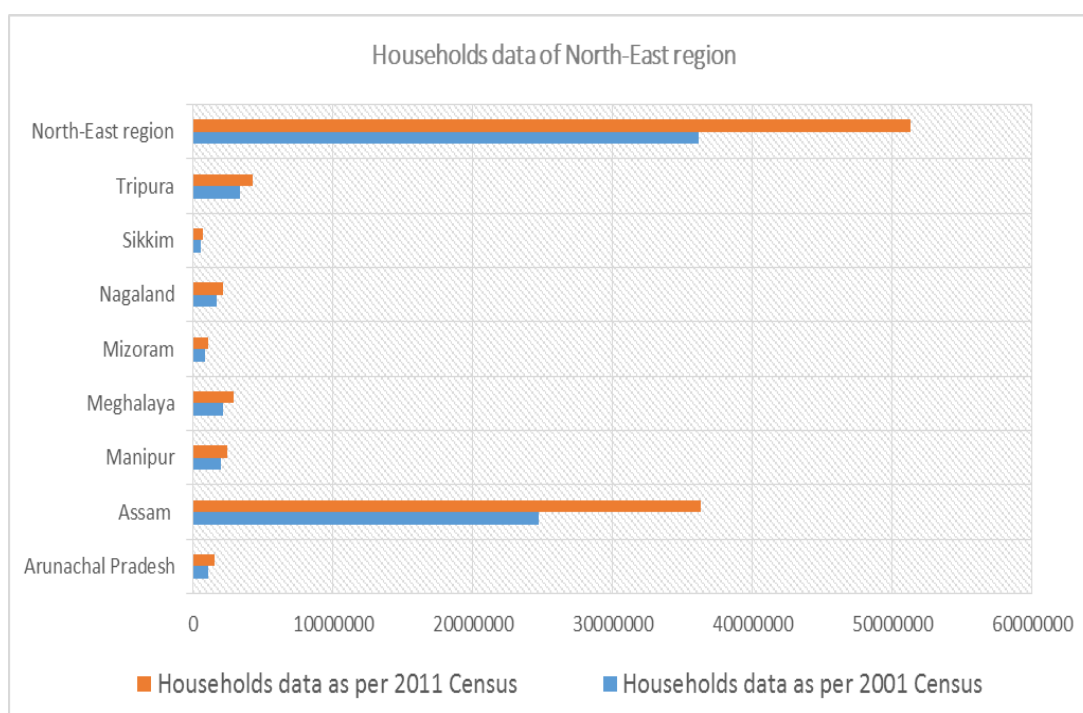
measure of relative performance of the Scheme across the north-eastern states. A number of indicators such as the proportion of households completing 100 days of work, the average days of employment provided per household and the percentage of registered households who have been provided with wage employment, can be used to capture the relative performance of the program through this dimension. The Act also makes it mandatory that 1/3<sup>rd</sup> of the beneficiaries of the program should be women, thereby ensuring that women cannot be excluded from NREGA related employment and also guarantees their participation in the labour market in areas where they have historically neglected to remunerated employment (Bonner *et al.* 2012). The extent to which the states implement this ‘1/3<sup>rd</sup> provision’ is, therefore, an ideal indicator to judge the performance of the program in these states. Further, increasing the participation of Scheduled Castes (SCs) and Scheduled Tribes (STs) constitutes an important component of social inclusion, and the participation of households belonging to these social groups is emphasized through numerous ways in the Act (see Vij, 2013 for details). Taking these aspects into consideration, our analysis under this section to assess the progress and performance of MGNREGA across the north-eastern states are based on five indicators, namely percentage of households provided employment as against demand for employment, average days of employment provided per household, proportion of households completing 100 days of work, the share of SCs and STs in total person days generated and the share of women in total person days generated.

### **3.2.1 First Five Years of NREGA Implementation in the North-East (2006-2011)**

During the initial five years of the NREGA implementation (2006-2011), the North-Eastern states had around 3.61 crores of rural households according to 2001 Census (Figure 3.1). Among the north-eastern states Assam had the largest share at 68.3 per

cent and Sikkim had the lowest share at 1.45 per cent (Table 3.1). Out of the total households in the north-eastern region, about 43 per cent households have demanded employment under the Act, and 41 per cent were offered jobs. Our state-wise analysis shows that the share of households provided with employment to total households varies considerably across the states in the region. Our estimates in Table 3.1 suggests that the proportion of people who have got employed under the programme is the highest in Mizoram (83 per cent) and the lowest in Arunachal Pradesh (29 per cent). Along with Arunachal Pradesh, in Assam and Sikkim too, only 1.3<sup>rd</sup> of the households have received employment under the Act. On the other side, Manipur and Nagaland too performed relatively well in this dimension.

**Figure 3.1 Distribution of Households in North-East region**



**Source:** Author's estimates from Census Data.

The main objective of MGNREGA is to meet employment demand. We do not find much variation across states in this dimension. This is clearly evident when we look at

employment provided as against employment demanded (Col. 10, Table 3.1). In the NER, our estimates shows that the region is able to provide employment to 97 per cent of households as against their demand during 2006-2011. At the state level, the state of Nagaland performed well as she is able to provide 100 per cent employment to households who have demanded for it, closely followed by Tripura, Manipur and Mizoram. In Arunachal Pradesh, only 85 per cent of those who have demanded were provided with jobs.

An important parameter that can help assess the performance of MGNREGA is the average person days generated in a year as employment generation for the rural poor is the fundamental objective of the Act. Evidence points to significant variation average person-days per rural household across the states in NER during 2006-2011. During this period, the households in the NER, on an average, has received just half of the mandated days of employment (50 days). At the state level, the best performing state in terms of average days of employment is Nagaland with an aggregate average of 77 person days, closely followed by Mizoram (76 average person days) and Manipur (70 average person days). Sikkim with an aggregate average of 69 person days also performed better than the average for NER. On the other side, the performance of states like Arunachal Pradesh (30 average person days) and Assam (38 average person days) is found to be shoddy as the rural households in these states, on average, employed for person days even lower than the average for NER. In essence, our estimates suggest that, in the first five years of MGNREGA implementation, in all the states, the promise of 100 days of guaranteed employment is still a distant dream. However, employment generation is found to be much higher than those created by earlier public work programmes.

As the main objective of MGNREGA is to improve livelihood security by ensuring at least one hundred days of wage employment in a financial year to every household, an assessment on whether the states in the NER were successful in achieving this milestone can give us some insights on the performance of the programme in these states.<sup>6</sup> Here we look at the average share of households who got 100 days of employment over the period, 2006-2011, and is derived from the number of households who got employment under the programme. In the entire north-eastern region, the percentage of household who got 100 days of employment is considerably low at 14.14 per cent. This implies that out of those who got employment, barely 14 per cent could complete 100 days during the initial years of implementation of MGNREGA. Across the states, the average share of households who completed 100 days of employment ranged from a high of 35.6 per cent in Mizoram to a low of 5.15 per cent in Arunachal Pradesh. Other better performing states in this dimension were Nagaland (29 per cent) and Sikkim (23 per cent), while Meghalaya (6 per cent) and Assam (10 per cent) languishing at the bottom. The fact that only less than 1/6<sup>th</sup> of the beneficiaries could work for 100 days under MGNREGA in the north-east region possibly reflects the poor implementation of the programme in the region.

Though not directly stated, one of the possible objectives of MGNREGA could be empowerment of women. This is clearly evident from one of the provisions under the Act which maintains that 1/3<sup>rd</sup> of the beneficiaries of the program should be women.

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<sup>6</sup>The use of this parameter as a measure of performance of the program needs to be approached with caution as it combines both supply and demand side effects. An insufficient supply of 100 days of work generally reflects the state's failure to provide work to those who are reported to be available for work. Alternatively, a worker might have worked for less than 100 days due to insufficient demand for work. If the former is true, the parameter may capture the implementation weaknesses of the program. In the case of latter being true, it may ultimately indicate success rather than failure as it may be a result of better livelihood options, lower incidence of poverty and so on. However, we believe that, given the lower levels of development and higher demand for jobs in India and majority of its state regions, completion of 100 days of work can be used as a reasonable measure of performance of program in these states.



This implies that minimum 33 percent of the employment generated under MGNREGA should be made available to women, which serve as an important safeguard to ensure the inclusion of women in labour market in areas where they have historically neglected to remunerated employment. Besides, provisions such as equal wages for men and women and creches for the children of women workers were included in the Act with the objective of ensuring that rural women benefit the most from the programme. Further, though not explicitly stated to help women, certain conditions such as provision of work within a radius of five kilometres from the residence, flexibility in selecting period and duration of employment and absence of contractors and supervisors are certainly help rural women and encourage their greater participation in the programme. Available evidence, however, points to the increasing participation of women in the programme, and has also exceeded their participation in earlier employment generation programmes such as the Sampoorna Gramin Rojgar Yojana (SGRY). There are also studies that highlight the important role played by some of these provisions in increasing the participation of women in the programme.

Our estimates for the north-east region suggest variation across states in the share of work days availed by women. However, the average share of work days availed by women for the period 2006-2011 exceeds the stipulated level of 33 per cent. If we compare our state level estimates with the MGNREGA provision of 1/3<sup>rd</sup> of employment to women, we find that, barring Arunachal Pradesh and Assam, in all other states, the share of women in total employment generated under MGNREGA is much higher than the mandatory 1/3<sup>rd</sup> provision. The states like Sikkim (45 per cent), Manipur (42.7 per cent), Meghalaya (42.3 per cent) and Tripura (42.1 per cent) have registered higher percentage of participation of women in MGNREGA in the NER.

The lowest share of women participation in the north-east region was recorded in states such as Arunachal Pradesh (27 per cent) and Assam (29 per cent). Interestingly, in many states, the rate of participation of women in MGNREGA is much higher than the usual female work participation rate (Table 3.2). This supports our claim that various provisions made under the Act were succeeded in ensuring increased participation of women in MGNREGA, unlike erstwhile employment generation programmes. For instance, there are studies that argue that the provision of payment of equal wages to men and women is an important factor explaining increased participation of women in jobs generated through MGNREGA. However, it needs to be also stated that the rate of participation of women in NER is considerably low as compared to the national average of women's share in NREGA (48 per cent).

Increasing the participation of SC and ST beneficiaries constitutes an important component of social inclusion. Though not explicitly stated in the Act, their participation in the programme is emphasised through numerous ways in the Act (Vij, 2003). The Act encourages the States to give precedence to employment for the backward groups, and also allows for irrigation works (like digging wells) on land owned by the backward groups to be taken up under MGNREGA (*ibid*). Available evidence shows that, compared to other social groups, SCs and STs are more likely to seek employment under MGNREGA (Ministry of Rural Development, 2014; Shankar et al. 2010; Shariff 2009; Sharma, 2009). Vij (2013) also maintains that the self-targeting mechanism for individuals who are unable to seek gainful employment anywhere else resort to MGNREGA for unskilled manual work has been paying great dividends. In the NER, the participation of Scheduled Castes (SCs) and Scheduled Tribes (STs) is found to be considerably higher than the national average. Our estimates show that SCs and STs constituted 66 per cent of total working days as

compared to the national average of 48 per cent. This is expected as beneficiaries hailing from these two social groups, especially ST, are significant in numbers in the north-east regions.<sup>7</sup> What is more interesting is the fact that in all states the share of SCs and STs in MGNREGA participation is much higher than their share in population (Table 3.3). This possibly indicates that, as a measure of social protection to the poor and vulnerable social groups, the scheme is making substantial impact, at least in the initial years of implementation of the programme, by augmenting their employment and incomes.

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<sup>7</sup> We refrain from doing a state-wise comparison of this indicator as there are a number of states in the NER which are populated by only Scheduled Tribes. Hence a comparison across states does not make any sense.

**Table 3.1 Details of Employment Generated in North-East India, 2006-2011**

EMPLOYMENT GENERATED (2006-2011)																				
Sr. No.	States	Households data as per 2001 Census	% age of Households	Ranking among the North-East region	No. of HH demanded employment (in Lakhs)	% age	Ranking of Households demanding employment	No. of HH provided employment (in Lakhs)	% age	Employment Provided as against Employment Demanded	Person days (In Lakhs)						Average person days per Households	Number of HH completed 100 days	% age of HH completed 100 days	
											Total	SCs	% age	STs	% age	Women				% age
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	Arunachal Pradesh	1063075	2.94	6	358622	33.73	8	304814	28.67	85.0	90400	600	0.66	79420	87.85	24610	27.22	30	15686	5.15
2	Assam	24676790	68.3	1	8348670	33.83	7	8008193	32.45	95.9	3015110	305610	10.14	1070300	35.5	863630	28.64	38	777358	9.71
3	Manipur	1988280	5.5	4	1368018	68.8	2	1364646	68.63	99.8	954290	96760	10.14	614850	64.43	407010	42.65	70	265014	19.42
4	Meghalaya	2101230	5.82	3	1105856	52.63	5	1073563	51.1	97.1	500150	2170	0.43	466790	93.33	211300	42.25	47	66604	6.2
5	Mizoram	804830	2.23	7	665230	82.65	1	663747	82.47	99.8	501550	200	0.04	500950	99.88	175190	34.93	76	236733	35.67
6	Nagaland	1660250	4.61	5	1115961	67.22	3	1115961	67.22	100.0	858720	0	0	858680	100	326280	38	77	327767	29.37
7	Sikkim	523690	1.45	8	189063	36.1	6	186334	35.58	98.6	128780	12110	9.4	55280	42.93	58320	45.29	69	43419	23.3
8	Tripura	3310115	9.16	2	2184197	66	4	2180623	65.88	99.8	1417040	278240	19.64	617100	43.55	596950	42.13	65	373939	17.15
9	North-East region	36128260	100		15335617	42.45		14897881	41.24	97.1	7466040	695690	9.32	4263370	57.1	2663290	35.67	50	2106520	14.14

Source: Author's estimates from nrega.nic.in

**Table 3.2 Female Work Participation Rate and Female Share in MGNREGA****Participation: A Comparison**

<b>States</b>	<b>Female Work Participation Rate (2001-2006)</b> <b>(a)</b>	<b>Female Share in MGNREGA Participation (2001-2011)</b> <b>(b)</b>	<b>Difference (b) - (a)</b>
Assam	21.6	27.2	5.6
Arunachal Pradesh	36.0	28.6	-7.4
Manipur	38.8	42.65	3.9
Meghalaya	33.9	42.25	8.3
Mizoram	41.9	34.93	-6.9
Nagaland	41.4	38	-3.4
Tripura	22.4	42.13	19.8
Sikkim	39.1	45.29	6.2

**Source:** Author's estimates.

**Table 3.3 Share of SC and ST in MGNREGA Participation and Share of SC and ST in States' Population**

<b>States</b>	<b>SC/ST share in Population (2001-2006)</b> <b>(a)</b>	<b>SC/ST Share in MGNREGA Participation (2001-2011)</b> <b>(b)</b>	<b>Difference (b) - (a)</b>
Assam	68.8	88.51	19.71
Arunachal Pradesh	19.55	45.64	26.09
Manipur	38.9	74.57	35.67
Meghalaya	86.7	93.76	7.06
Mizoram	94.5	99.92	5.42
Nagaland	96.5	100	3.5
Tripura	38.4	52.33	13.93
Sikkim	49.6	63.19	13.59

**Source:** Author's estimates.

### **3.2.2 Second Five Years of NREGA Implementation in the North-East (2011-2015)**

We use the same set of indicators to assess the progress and performance of MGNREGA across the north-eastern states during the second five years (2011-2015) of MGNREGA implementation. During this period, the NER had a total of 5.12 crores of rural households as per 2011 Census (Figure 3.1). Only about 25 per cent of rural households had demanded employment and 25 per cent were provided with employment during 2011-2015 (Table 3.4). It shows that despite the significant increase in number of households between the two sub periods, 2006-2011 and 2011-2015, the percentage of households who have relied on MGNREGA for employment has declined. Barring Manipur and Nagaland, such a decline was observed in all the states in the region (Figure 3.2). For instance, in Assam, even the absolute number of households relied on MGNREGA for jobs have declined between the two sub-periods. This is indeed a disturbing trend, and one needs to find out what explains the decreasing reliance on MGNREGA for jobs by rural households, though which is beyond the scope of this study.

As mentioned before, one of the main objectives of MGNREGA is to meet the demand for employment. In the NER, according to our computations, 96 per cent of households were able to find employment as against their demand under MGNREGA. However, this shows a marginal dip by one percentage point between the first and second sub-period. The position of states in terms of employment provided remain more or less unchanged, but the share has declined in all states. The largest decline was observed in the state of Arunachal Pradesh, where the percentage of people who have provided with employment as against their demand went down to 79.3 per cent

in the second sub-period from 85 per cent in the first sub-period. In other states, the share has declined only marginally.

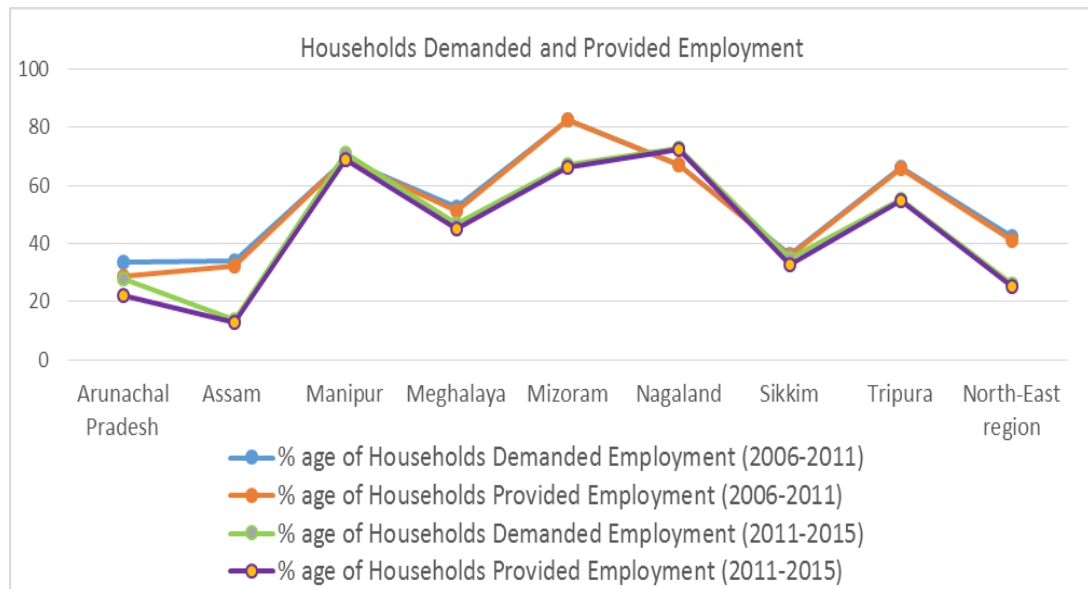
**Table 3.4 Details of Employment Generated in North-East India, 2011-2015**

EMPLOYMENT GENERATED (2011-2015)																				
Sr. No.	States	Households data as per 2011 Census	% age of Households	Ranking among the North-East region	No. of HH demanded employment (in Lakhs)	% age	Ranking of Households demanding employment	No. of HH provided employment (in Lakhs)	% age	Employment Provided as against Employment Demanded (in per cent)	Persondays (In Lakhs)						Average persondays per Households	Number of HH completed 100 days	% age of HH completed 100 days	
											Total	SCs	% age	STs	% age	Women				% age
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	Arunachal Pradesh	1504000	2.93	6	415581	27.63	7	329411	21.9	79.3	70090	100	0.14	62180	88.71	20980	29.93	21	4368	1.32
2	Assam	36296000	70.78	1	4913651	13.54	8	4679553	12.89	95.2	1140830	68180	5.98	219570	19.25	292690	25.66	24	50861	1.1
3	Manipur	2440000	4.76	4	1730788	70.93	2	1682401	68.95	97.2	567750	6020	1.06	349070	61.48	200720	35.35	34	112075	6.66
4	Meghalaya	2884000	5.62	3	1344801	46.63	5	1292449	44.81	96.1	621290	4130	0.66	580000	93.35	261210	42.04	48	125959	9.75
5	Mizoram	1076000	2.1	7	722148	67.11	3	713920	66.35	98.9	412300	460	0.11	410940	99.67	110870	26.89	58	68363	9.58
6	Nagaland	2136000	4.17	5	1553761	72.74	1	1548896	72.51	99.7	626570	4190	0.67	583100	93.1	172520	27.53	40	41983	2.71
7	Sikkim	676000	1.32	8	235285	34.81	6	220925	32.68	93.9	128690	5630	4.37	48440	37.64	58420	45.4	58	33768	15.28
8	Tripura	4268000	8.32	2	2362150	55.35	4	2343692	54.91	99.2	1981190	347420	17.54	851900	43	871920	44	85	844128	36.01
9	North-East region	51280000	100		13278165	25.89		12811247	24.98	96.5	5548710	436130	7.86	3105200	55.96	1989330	35.85	43	1281505	10

Source: Author's estimates fromrega.nic.in



**Figure 3.2 Trend line of Households Demanded and Provided Employment**

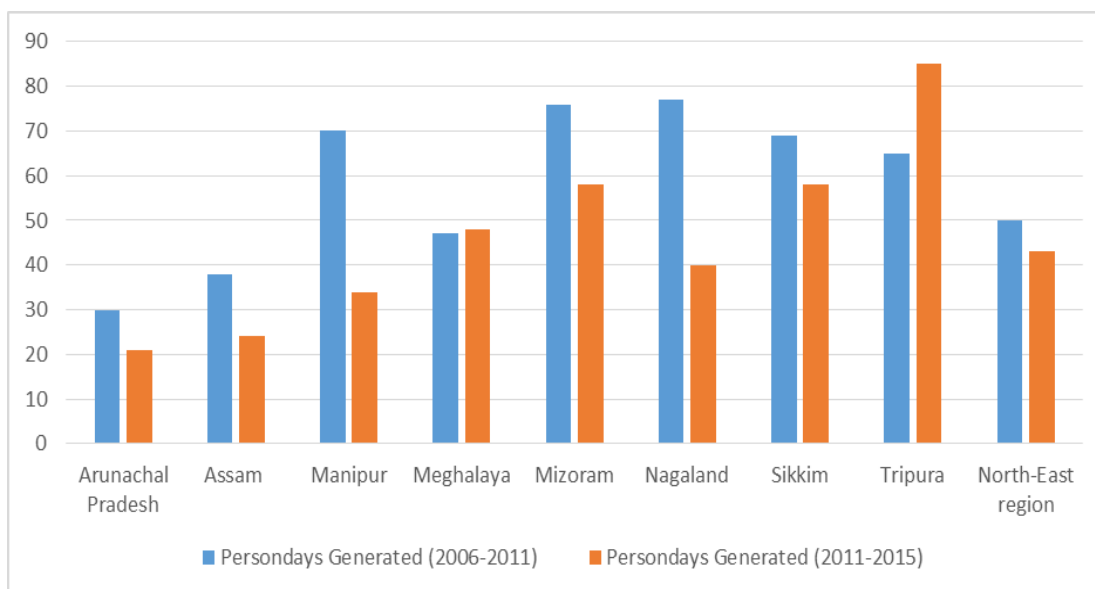


**Source:** Author's estimates.

Another important indicator, average person days generated in a year, used to judge the progress and performance of the programme too recorded a decline between 2006-2011 and 2011-2015. During the second sub-period, the households in NER, on average, got employed for 43 days, which is a sharp decline from 50 person days in the first sub-period (Figure 3.3). Except Meghalaya and Tripura, the average man days worked under MGNREGA experienced a marked decline. For instance, in Manipur and Meghalaya, the number of man days employed declined, on average, by 36 days. Sikkim, a state with relatively better socio-economic development (as observed in Chapter 2), also witnessed a decline by 11 man days between the two sub-periods. Tripura and Meghalaya are the only states that have registered an increase in average number of person days employed, and in Tripura, there has been a significant increase in number of man days from 65 person days in the first sub-period to 85 person days in the second sub-period, much closer to the stipulated 100 days. The significant decline in number of man days perhaps point to the fact that the objective

of providing 100 days of employment to those have demanded for it seems a remote possibility.

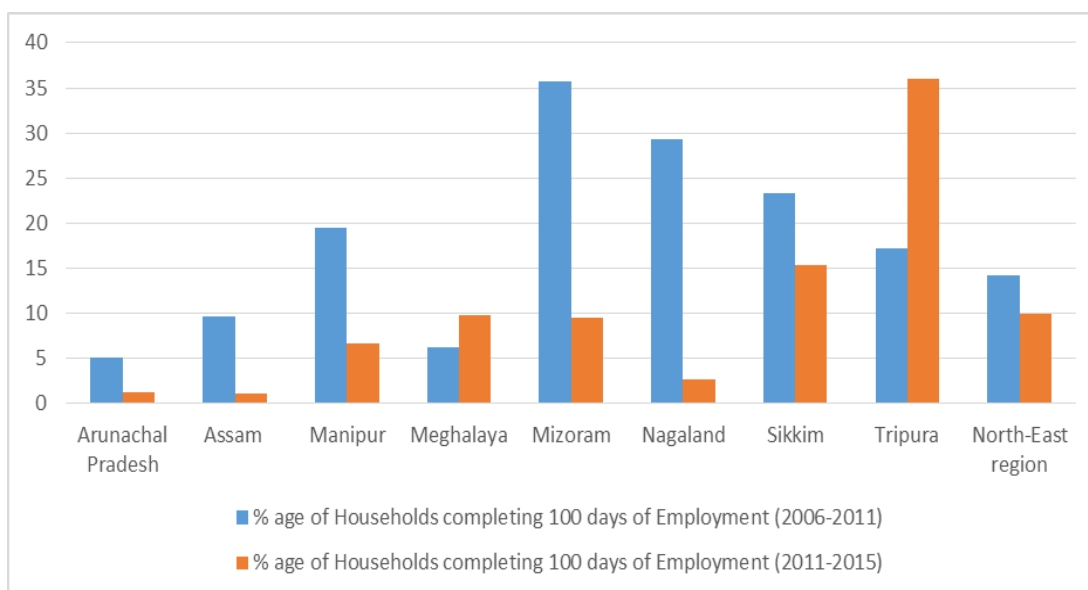
**Figure 3.3 Average Persondays Generated**



**Source:** Author's estimates.

As regards the indicator of percentage of households who have completed 100 days of employment too, there has been a decline over time. Our computations suggest that just 1/10<sup>th</sup> of the households (10 per cent) who have been provided with employment in the second sub-period could be engaged for 100 days, a decline from 14 per cent during 2006-2011 (Figure 3.4). The decline was observed across the states in the region, barring a few. The states of Nagaland, Mizoram, Manipur and Sikkim experienced a faster decline between the two sub-periods. In Arunachal Pradesh and Assam, less than 2 per cent of the households were able to meet the mandatory provision of 100 days. Tripura and Meghalaya were the only gainers in terms of this indicator, and the state of Tripura witnessed a substantial increase in the share of households who have completed 100 days of employment.

**Figure 3.4 Percentage of Households Completed 100 days of Employment**

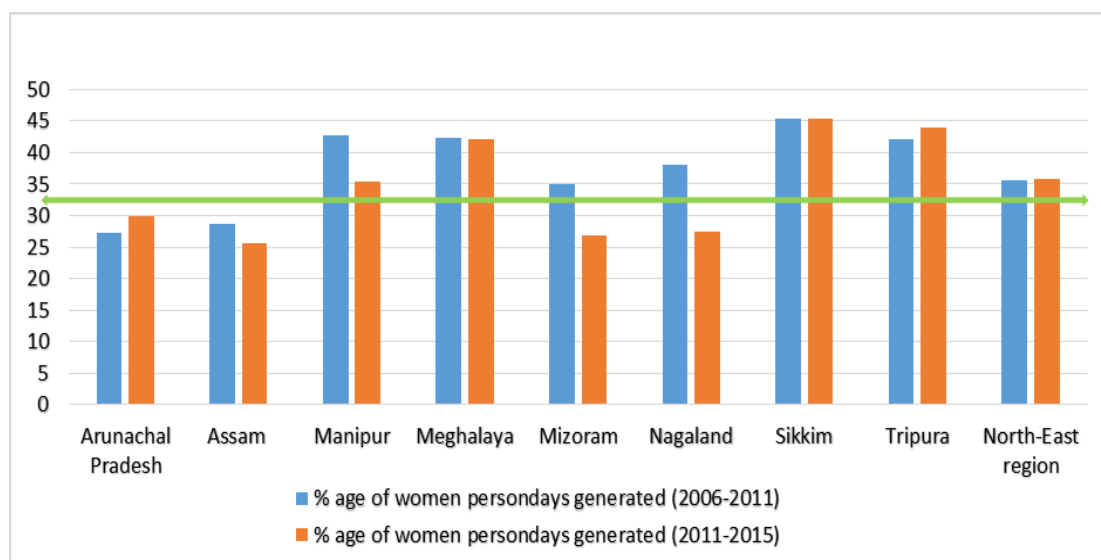


**Source:** Author's estimates.

In the case of indicators considered to assess the inclusiveness of the programme too, we do not find encouraging trend. While the share of women in total person days generated remained constant, the share of SCs and STs in person days witnessed a decline. In 5 out of eight states, the share of work days availed by women registered a decline between two sub-periods, and in 4 out of eight states the share remained below the stipulated level of 33 per cent in the second sub-period (Figure 3.5). Even wherever the share has increased, it has gone up only marginally. In Nagaland and Mizoram, it declined by such an extent that the share fell below the 33 per cent mandatory requirement. As regards the share of SC and ST households in total person days generated, there has been a decline across the board. It declined from 66 per cent in the first sub-period to 63 per cent in the second sup-period in the NER (Figure 3.6). This decline was mostly aided by the faster decline registered by Assam, Manipur and Sikkim. On the whole, the situation is not so encouraging when we consider the 'inclusiveness' dimension of the programme. It is also disturbing to note

that in half of the states the programme failed to generate the mandatory 1/3<sup>rd</sup> employment to women. The increasing participation of women that we found in the first five years of implementation of the programme seems to have disappeared in the later years of the programme.

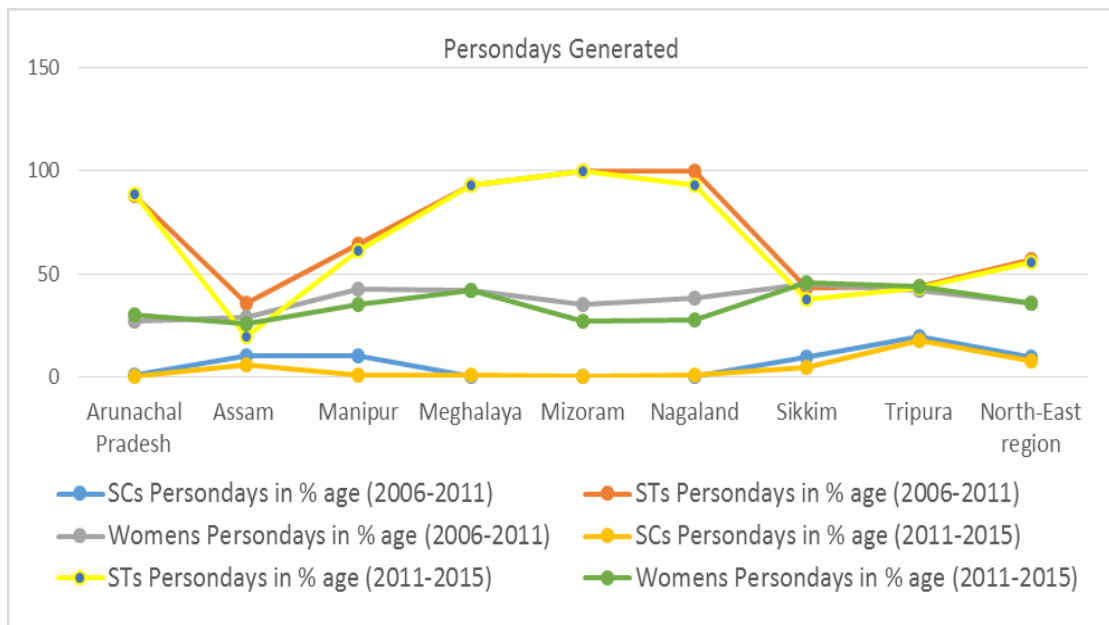
**Figure 3.5.<sup>8</sup> Women's Share in Persondays Generated**



**Source:** Author's estimates.

<sup>8</sup>The green line represents 33 per cent of women's empowerment to employment, implemented by the Act

**Figure 3.6 Person Days Generated**



**Source:** Author's estimates.

In short, the inter-state comparison of performance of NREGA in NER for the two sub-periods, 2006-2011 and 2011-2016, reveals that majority of the states have performed poorly in the later years of implementation of MGNREGA. The only state that has considerably improved its performance between two sub-periods is Tripura. According to Sanjoy Roy<sup>9</sup>, performance of MGNREGA is much better in Tripura due to the better working of the three-tier Panchayati Raj Institutions (PRIs) in the state. Another reason suggested for the success of MGNREGA in the state is the policy of People's Plan introduced in Tripura called 'Gramoday'. Other key factors are the appointment of Gram Rozgar Sevak (GRS) in each GP and one technical assistant for every 10 GPs. However, the mediocre performance of Sikkim in the second sub-period with respect to the selected indicators needs to be also emphasized here. It is especially important since the state has achieved a better socio-economic development

<sup>9</sup>The NEHU Journal, Vol VIII, No.1, January 2010

among the states in the region, a factor that would have clearly helped the state to derive as much gain as possible from this programme.

### **3.3 Work Completion Rate**

The study also uses asset creation as one of the factors to judge the performance of programme in the north-eastern states. The responsibility of any employment guarantee program is much more than promising employment to the poor households, because guarantee alone will only partially succeed in generating employment in an economy (Hirway *et al.*, 2010). Construction of productive assets is therefore critical. It is maintained that, along with its direct impact in respect of poverty reduction, a well-crafted employment guarantee program such as MGNREGA can put the economy on a path towards labor intensive growth via the creation of productive assets. Therefore, in order to assess the performance of the program one needs to also look at the extent of asset created through MGNREGA. The study uses the work completion rate, i.e., the percentage of work completed against the percentage of work taken up, as an indicator to judge the performance of the programme in this dimension. In terms of total works taken up and total works completed, Tripura is well ahead of all other states in the NER. Evidence shows that more than half of the work taken up in the NER and about 2/3<sup>rd</sup> of the work completed in the NER are from Tripura (Table 3.5).

In terms of work completion rate too, Tripura performed much better than other states in the region. Tripura recorded a work completion rate of 49.74 per cent, followed by Mizoram (36.7 per cent) and Manipur (32.4 per cent) (Figure 3.7). Arunachal Pradesh had the lowest work completion rate of 15.3 per cent, followed by Meghalaya (23.3 per cent), Nagaland (24.1 per cent) and Sikkim (27.9 per cent). Available literature

maintains that the work completion rate depends on state-specific issues related to implementation of the programme, and is influenced by factors like weak planning, absence of technical help, erratic disbursement of funds, and delays in wage payment. For instance, a study carried out by IIM-Shillong (2009) for Meghalaya and Sikkim<sup>10</sup> showed that irregular flow of funds resulted in considerable lag in completion of works. Absence of technical support to beneficiaries and inappropriate planning were also responsible for non-completion of works, according to these studies.

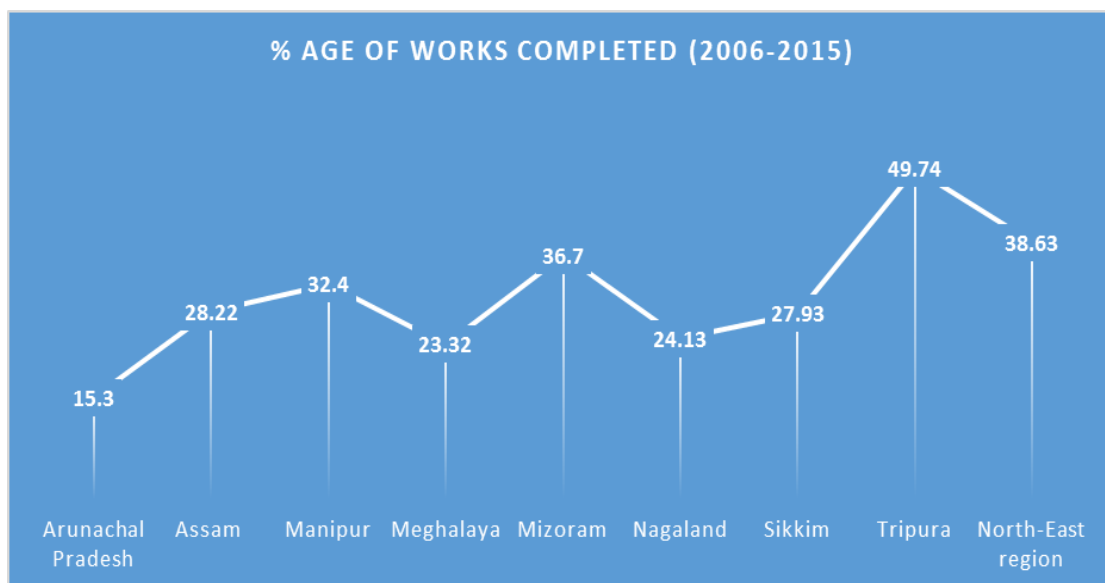
**Table 3.5 Work Progress in the North-East region, 2006-2015**

	<b>States</b>	<b>Total Works Taken up</b>	<b>Total Works Completed</b>	<b>% age of Works Completed</b>
<b>Sr.No.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1</b>	<b>Arunachal Pradesh</b>	21035	3219	15.3
<b>2</b>	<b>Assam</b>	391177	110409	28.22
<b>3</b>	<b>Manipur</b>	97534	31597	32.4
<b>4</b>	<b>Meghalaya</b>	127728	29790	23.32
<b>5</b>	<b>Mizoram</b>	57692	21173	36.7
<b>6</b>	<b>Nagaland</b>	108583	26197	24.13
<b>7</b>	<b>Sikkim</b>	24895	6954	27.93
<b>8</b>	<b>Tripura</b>	816729	406259	49.74
<b>9</b>	<b>North-East region</b>	1645373	635598	38.63

Source: nrega.nic.in

<sup>10</sup>Indian Institute of management-Shillong (IIM-S), 'Appraisal of MGNREGA in Sikkim and Meghalaya.'

**Figure 3.7. Percentage of Works Completed, 2006-2015**



**Source:** estimates based on the table

### **3.4 Poverty Alleviation**

Though not stated explicitly, given that the programme targets economically and socially backward households in rural areas, poverty alleviation seems to be one of the objectives of the programme. Although the provision of jobs has a direct bearing on poverty levels, the critical factor that guides this relationship is the wages paid to workers. In the context of MGNREGA, we believe that payment of wages and wage rates too play crucial role as they ultimately result in program's ultimate goal of livelihood security. The Act entitles every worker to wages at a specified wage rate for each day of work. Hence, the wages disbursed to workers under MGNREGA especially the average wage rate received by the households (and the wage differentials) can be used as an indicator to judge the performance of the program in these states. Obviously, the participation of workers in the program also depends on the rate at which the wages are paid especially the differences in the wage rate under NREGA and the wage rate prevailing in other alternate occupations. However, one



needs to also ensure that the workers have received their payments in time. In other words, considerable delay in wage payment can act as a deterrent for participation of workers in the jobs generated through the programme. Keeping this in mind, we use two indicators to assess the progress of the programme in the NER. They are: (a) Delay in wage payments, and (b) ratio of MGNREGA wage rate to wage rate of unskilled worker.

### **3.4.1 Delay in Payments**

The MGNREGA act mandates that payment of wages shall be made to the beneficiaries in 15 days once the Muster Roll is closed. The Act also clearly lays down the procedure to be followed in case there is a delay in payment of wages to workers. It states that, in case of a delay in wage payment, workers are eligible for a compensation at the rate of 0.05 per cent of the unpaid wages per day of delay beyond the sixteenth day of the Muster Roll closure. Despite having such clear provisions in the Act, significant delays in payment of wages have been reported by many studies. For instance, Khera (2011) finds significant delays in wage payment, and argues that delays on wage payments are a huge disincentive for beneficiaries who seek employment under the Scheme. It is also argued that such delays dilute the spirit of the Act, which is meant as an instrument of social security for the poor. In NER too, we observe significant delays in wage payments across all the states (Table 3.6). In states like Meghalaya, almost 93 per cent of transactions are delayed by more than 15 days, the stipulated number of days according to the Act. Other states that closely follow Meghalaya are Nagaland (81 per cent), Arunachal Pradesh (70 per cent) and Assam (68 per cent). In the case of Sikkim too, about 57 per cent of transactions are delayed by more than 15 days. On the other side, delays are considerably lower in the state of Mizoram, where only 2 per cent of the payments are delayed by more than 15

days. Similarly, in Manipur and Tripura too, the delays are relatively low. As mentioned before, these delays possibly explains the declining interest among the households to rely on MGNREGA for jobs. Studies have observed that huge delays in wage payments resulted in workers shifting back to their former occupations, though less rewarding in terms of wages (Verma and Shah, 2012)

**Table 3.6 Wage Payments Delay in North-Eastern States, 2012-2015**

<b>Delayed Wage Payments</b>				
	<b>States</b>	<b>Years</b>	<b>Delayed Wage Payments</b>	
			<b>Delayed payments above 15 days</b>	
			<b>% age of Total Transactions</b>	<b>% age of Amount Involved</b>
<b>Sr.No.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1</b>	<b>Arunachal Pradesh</b>	<i>2012-13</i>	80.73	81.58
		<i>2013-14</i>	67.9	67.65
		<i>2014-15</i>	69.73	67.24
<b>2</b>	<b>Assam</b>	<i>2012-13</i>	9.24	13.33
		<i>2013-14</i>	14.67	16.79
		<i>2014-15</i>	68.2	70.32
<b>3</b>	<b>Manipur</b>	<i>2012-13</i>	10.96	13.22
		<i>2013-14</i>	20.15	23.92
		<i>2014-15</i>	12.62	11.51
<b>4</b>	<b>Meghalaya</b>	<i>2012-13</i>	32.97	35.26
		<i>2013-14</i>	73.57	75.57
		<i>2014-15</i>	93.5	93.82
<b>5</b>	<b>Mizoram</b>	<i>2012-13</i>	0.14	0.16
		<i>2013-14</i>	1.94	2.63
		<i>2014-15</i>	1.67	1.69
<b>6</b>	<b>Nagaland</b>	<i>2012-13</i>	34.18	33.95
		<i>2013-14</i>	59.73	58
		<i>2014-15</i>	80.96	80.67
<b>7</b>	<b>Sikkim</b>	<i>2012-13</i>	17.87	17.91
		<i>2013-14</i>	29	28.41
		<i>2014-15</i>	56	56.42
<b>8</b>	<b>Tripura</b>	<i>2012-13</i>	2.49	2.6
		<i>2013-14</i>	5.12	5.03
		<i>2014-15</i>	31	30.79

Source: nrega.nic.in

### **3.4.2 MGNREGA and Unskilled Wages**

The MGNREGA notified wages have increased across the North-East states since its implementation in 2006, where Mizoram observing the highest increase of the MGNREGA wages with 13.55 per cent and Arunachal Pradesh the lowest with 11.59 per cent over the period, 2006-2015. The MGNREGA wages is higher than the minimum unskilled wages in every states of the North-East, except in Mizoram and Sikkim (Table 3.7). In Sikkim, the wage rate for unskilled workers was consistently higher than the MGNREGA wage rate since the implementation of programme. In fact, the gap has increased considerably in the later years of the programme, thanks to the faster rate of increase in unskilled wage rate as compared to the MGNREGA wage rate. The significant delays in wage payment coupled with substantial differences in the wage rate of unskilled and MGNREGA worker possibly explains the lesser participation of workers in MGNREGA in the state for the later years.

**Table 3.7 Comparison of Unskilled and NREGA Wage Rates in North-East Region (Rs per day), 2006-2015**

Sr. No.	Year	Arunachal Pradesh		Assam		Manipur		Meghalaya		Mizoram		Nagaland		Sikkim		Tripura		North-East India	
		Minimum wages for Unskilled Workers	Average Wage rate per day (MG NREGA)	Minimum wages for Unskilled Workers	Average Wage rate per day (MG NREGA)	Minimum wages for Unskilled Workers	Average Wage rate per day (MG NREGA)	Minimum wages for Unskilled Workers	Average Wage rate per day (MG NREGA)	Minimum wages for Unskilled Workers	Average Wage rate per day (MG NREGA)	Minimum wages for Unskilled Workers	Average Wage rate per day (MG NREGA)	Minimum wages for Unskilled Workers	Average Wage rate per day (MGN REGA)	Minimum wages for Unskilled Workers	Average Wage rate per day (MGN REGA)	Average Minimum wages for Unskilled Workers	Average Wage rate per day (MGN REGA)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	2006-07	55	55	48	66	70	72	70	70	91	91	66	66	85	85	51	60	67	71
2	2007-08	55	65	48	73	70	81	70	70	91	91	66	100	85	85	51	60	67	78
3	2008-09	55	79	55	79	72	79	70	79	103	79	80	79	100	79	59	79	74	79
4	2009-10	80	80	58	100	81	81	100	100	132	110	80	100	100	100	66	100	87	96
5	2010-11	0	118	100	130	0	126	100	117	170	129	100	118	130	118	46	118	81	122
6	2011-12	135	118	100	130	81	126	100	117	132	129	80	118	100	118	100	118	104	122
7	2012-13	135	124	100	136	122	144	100	128	132	136	80	124	200	125	100	123	121	130
8	2013-14	134	134	94	152	122	153	100	145	220	148	100	135	200	136	61	133	129	142
9	2014-15	150	153	178	167	122	174	170	153	220	170	115	154	220	155	142	150	165	160
10	Average for 2006-15	89	103	87	115	82	115	98	109	143	120	85	110	136	111	75	105	99	111

Source: Minimum Wages India

### **3.5 Unemployment Allowance**

If an applicant for a job under the programme is not provided employment within 15 days of receiving his application or from the date on which the employment has been sought, the applicant is eligible for daily unemployment allowance. As seen from Table 3.8., there were no payments of unemployment allowance is made in any state in the North-East. One reason could be lack of awareness about this provision under the Act. It is even possible that the beneficiaries have not attempted to know their rights provided by the Act. One of the main reasons for non-provision of dated receipts is the legal requirement for payment of unemployment allowance as mandated by the Act, in case employment is not provided by the state within 15 days. Further, the fact that unemployment allowance is to be paid by State Governments appears to act as a disincentive for them to provide dated receipts.

**Table 3.8 Unemployment Allowance Payments**

Unemployment Allowance Payments				
Sr.No.	States	Years	Paid	
			No. of Days	Amount (In Rs)
1	2	3	4	5
1	Arunachal Pradesh	2012-13	0	0
		2013-14	0	0
		2014-15	0	0
2	Assam	2012-13	0	0
		2013-14	0	0
		2014-15	0	0
3	Manipur	2012-13	0	0
		2013-14	0	0
		2014-15	0	0
4	Meghalaya	2012-13	0	0
		2013-14	0	0
		2014-15	0	0
5	Mizoram	2012-13	0	0
		2013-14	0	0
		2014-15	0	0
6	Nagaland	2012-13	0	0
		2013-14	0	0
		2014-15	0	0
7	Sikkim	2012-13	0	0
		2013-14	0	0
		2014-15	0	0
8	Tripura	2012-13	0	0
		2013-14	0	0
		2014-15	0	0

Source: nrega.nic.in

### 3.6 Grievances and Complaints

Our earlier discussion reveals that there is hardly any instance of unemployment allowance being paid to those who have not been able to find employment under MGNREGA. We relate this to the lack of awareness among the beneficiaries about the provisions under the Act. Our reasoning can be further strengthened if we look at the extent of grievances and complaints filed by the beneficiaries in each state. In order for the workers to enjoy their rights, the Ministry of Rural Development has

also formulated a definite mechanism to address the grievances and complaints filed by the applicants (Transparency and Public Accountability Rules NREGA, Government of India).

Despite significant delay in wage payments across the states in NER and absence of payment of unemployment allowance, the number of complaints and grievances received in each state seem to be considerably low (Table 3.9). This further reinforces our conjecture that the lack of awareness among the beneficiaries on the various provisions under the Act possibly driving the higher incidence of wage payment delays and non-payment of unemployment allowance. In other words, if people are more aware, then number of complaints would have been significantly higher. Even in a highly literate state in the region like Sikkim the number of complaints are found to be much lower.

**Table 3.9 Grievances and Complaints under MGNREGA**

<b>Sl. No.</b>	<b>State</b>	<b>Received</b>	<b>Pending</b>	<b>Forwarded</b>	<b>Disposed</b>
<b>1</b>	<b>Arunachal Pradesh</b>	16	16	0	0
<b>2</b>	<b>Assam</b>	427	67	2	358
<b>3</b>	<b>Manipur</b>	103	97	1	5
<b>4</b>	<b>Meghalaya</b>	35	31	0	4
<b>5</b>	<b>Nagaland</b>	4	4	0	0
<b>6</b>	<b>Sikkim</b>	5	1	1	3
<b>7</b>	<b>Tripura</b>	185	28	34	123
<b>8</b>	<b>Mizoram<sup>11</sup></b>	NA	NA	NA	NA

Source: nrega.nic.in

<sup>11</sup>Data not available for this state

### **3.7 Conclusion**

Using a selected key performance indicators, this chapter carried out an analysis to understand the status of implementation and performance of MGNREGA in the North-Eastern states. The main purpose was to explore whether there exists significant differences in performance across the states in North-Eastern region, as has been observed for larger states in India. By doing so, we also tried to see how the state of Sikkim has performed in comparison with other states, given that the former has done relatively well in various socio-economic parameters. In order to examine the performance of MGNREGA over time, we divided the whole period into two sub-periods, 2006-2011 and 2011-2015, and then compared the performance of the programme between the two sub-periods.

Our analysis possibly indicates that the euphoria and excitement generated in the initial years of MGNREGA seem to have given way to cynicism in the later years of the programme. Evidence shows that despite the significant increase in number of households between the two sub periods, 2006-2011 and 2011-2015, the percentage of households who have relied on MGNREGA for employment has declined. The average person days generated in a year too witnessed a decline in most of the states in the region. Empirical evidence points to substantial decline in the share of households engaged in MGNREGA jobs for 100 days. Our estimate for the later period shows that a mere 1/10<sup>th</sup> of the households employed through MGNREGA could only find job for 100 days in the NER.

The situation is not so encouraging even when we consider the ‘inclusiveness’ aspect of the programme. The increasing participation of women that we found in the first five years of implementation of the programme seems to have disappeared in the later



years of the programme. In half of the states in the NER, the programme failed to generate the mandatory provision of 1/3<sup>rd</sup> employment to women. The share of SCs and STs in person days too witnessed a decline between the two sub-periods. It is even interesting to note that such a disillusionment towards jobs generated through MGNREGA is observed even when the MGNREGA wage in most of the states is higher than the minimum unskilled wage rate. This perhaps indicate that reason for the disenchantment towards MGNREGA jobs has to be found elsewhere. One possible factor that can possibly explain this phenomenon is the delay in payment of wages. It is also evident from our analysis that delay in wage payments is a serious issue in all the states in NER. According to our study, more than half of the transactions are delayed by more than 15 days, in majority of the states. Interestingly, despite the significant delay in wage payments and absence of payment of unemployment allowance, the number of complaints and grievances received in each state seem to be considerably low. This possibly highlights the fact that the lack of awareness among the beneficiaries on the various provisions under the Act possibly driving the higher incidence of wage payment delays and non-payment of unemployment allowance, thereby resulting in lesser participation.

Thus it can be argued that the lesser participation of workers and delay in wage payment can be addressed to a greater extent if there is a greater awareness about the Act among the beneficiaries. However, except some anecdotal evidences, little attempt has been made to understand the role of awareness on the effective functioning of the programme. The chapters that follow address the question of how important is awareness levels of beneficiaries in explaining the efficacy of the programme in terms of lesser participation of workers and wage payment delays, by focusing on the state of Sikkim. We focus on Sikkim as the state has recorded a

mediocre performance in terms of the selected indicators despite having a better socio-economic status among the states in the region, a factor that would have clearly helped the state to derive much gains from this programme. This is indeed a disturbing trend, and one needs to find out what explains the decreasing reliance on MGNREGA for jobs by rural households in the state, which is attempted next.

## **CHAPTER 4**

### **IMPACT OF AWARENESS ON EFFICACY: EVIDENCE FROM NORTH-SIKKIM**

#### **4.1 Introduction**

The analysis that we carried out in earlier chapters reveals that the fascination towards MGNREGA as a source of livelihood in the initial years of implementation of the programme is dwindling as is evident from the lesser participation of households, especially women. We already noticed that lesser participation was noticed, even among the states, where the wage rate under MGNREGA is observed to be better than the wage rate for skilled workers. This led us to join the band of researchers who argued that delays in wage payment, as observed in many of the states in the region in our earlier chapters, could be one of the factors that explain this lesser participation in later years. Interestingly, the Act clearly states that, in case of a delay in payment of wages, the workers should be adequately compensated. Despite the presence of this provision in the Act, more than 50 per cent of the payments are delayed beyond the stipulated number of days in almost all the states in the region, and no instances of payment of compensation are noticed. As we have also observed lesser number of complaints and grievances filed from each state even in the presence of such delays, we maintain that the lack of awareness of workers on the various provisions under the Act is possibly driving the efficacy of the programme in terms of lesser participation of workers and delays in wage payment. We therefore hypothesise that lesser participation of workers and delay in wage payment can be addressed to a certain extent if awareness level of people can be enhanced. In this chapter, we test this

hypothesis using the fieldwork data collected from MGNREGA households in the North District of Sikkim.

This chapter is organised as follows. Next section briefly discusses about the performance of MGNREGA in the state of Sikkim and its districts using some selected indicators. This section would also present the justification for selecting north district for our detailed analysis. Thereafter, we will discuss about the fieldwork and the major highlights of the data collected from the households. In the penultimate section, we examine whether the awareness level of beneficiaries of MGNREGA influences the efficacy of the programme. The last section concludes.

#### **4.2 MGNREGA in Sikkim**

The state of Sikkim came into existence in 1975. Sikkim is the least populated state in India, and the smallest in the country in terms of area after Goa. The state has four districts, namely East Sikkim, West Sikkim, South Sikkim and North Sikkim. North Sikkim is the biggest among the districts in terms of area, accounting for 60 per cent of the total area, followed by East District, West District and South District with 16 per cent, 13 per cent and 11 per cent respectively. Though larger in area, the North District accounted for just 8 per cent of the state's total population with a density of 10 persons per square kilometre in 2011 (HDR, 2001). Among the districts, the North District had the highest proportion of ST to the total population in the state. In terms of social and economic development, North Sikkim lagged behind all districts in the state (HDR, 2001). The North-District registered the lowest sex ratio (769 as against the state average of 889 in 2011), lowest life expectancy (0.512 as against the state average of 0.663 in 1998), lowest enrolment ratio (0.362 as against the state average

of 0.448) and lowest per capita income. In terms of HDI too, the north-district lagged behind other districts in 1998.

As mentioned earlier, the MGNREGA was implemented phase-wise in Sikkim. In the first phase, the programme was implemented in North District during 2006-2007. The East and South Districts were covered in the second phase started in 2007 and ended in 2008. The West district was covered in the final phase implemented during 2008-2009. A district-wise comparison of MGNREGA using selected indicators presented in Table 4.1 yields interesting picture. In line with what we observed across states, the performance of the programme is less appealing in the second half of the period since its implementation. In most of the districts, we observed a decline in all the indicators between the first and the second sub-period. However, the only district that has registered a decline in all the indicators was the North District. In the North District, the percentage of households who have received employment, average person days per household, share of households who have completed 100 days and share of women and SC/ST in person days have witnessed a decline between 2006-2011 and 2011-2016. Compared to other districts, the decline was faster in average person days per households (declined by 14.4 person days), share of employment provided in employment demanded (8 per cent decline) and the share of households who have completed 100 days (declined by 15 percentage points). In fact, North District turned out to be the only district where the average share of work days availed by women for the period 2006-2011 did not exceed the stipulated level of 33 per cent. Evidence also points to significant delays in wage payment across the four districts. The delays are significantly high in West and North Districts. While 1/3<sup>rd</sup> of the wage payments in the West District are delayed by more than 15 days, 1/4<sup>th</sup> of the wage payments in the North District are delayed by more than 15 days.

**Table 4.1 Performance of MGNREGA in Sikkim: A District-wise Picture**

District	Employment Provided as against Employment Demanded		Share of Women in Person days		Share of SC/ST in Person days		Average Person days per Household		Share of Households completed 100 Days	
	2006-2011	2011-2016	2006-2011	2011-2016	2006-2011	2011-2016	2006-2011	2011-2016	2006-2011	2011-2016
North District	98.9	91.1	35.1	29.5	94.3	93.0	72.9	58.5	35.4	20.8
East District	95.9	96.0	49.9	40.1	37.2	29.4	68.7	54.6	21.8	10.8
South District	98.9	94.7	39.6	47.9	33.8	31.7	62.0	60.9	17.2	10.3
West District	99.3	92.5	43.4	44.6	59.6	44.9	67.2	55.9	18.9	15.0
<b>Average for Sikkim</b>	<b>98.3</b>	<b>93.6</b>	<b>42.0</b>	<b>40.5</b>	<b>56.2</b>	<b>49.8</b>	<b>67.7</b>	<b>57.5</b>	<b>23.3</b>	<b>14.2</b>

**Note:** For East and South Districts, the first sub-period refers to 2007-2011 and for the West District, the first sub-period refers to 2008-2011.

**Source:** Author's estimates.

**Table 4.2 Delay in Payment of Wage at the district level (in percent), 2012-2014**

District	Delayed Payments above 15 Days	
	In Transactions	In Amount
North District	22.61	23.66
East District	18.19	18.055
South District	17.515	17.65
West District	34.52	33.93

**Source:** Author's estimates.

The preceding discussion clearly points to the lesser participation of workers and considerable delays in wage payments across the four districts of Sikkim. As discussed before, despite the low incidence of people participation and huge delays in wage payment, absence of any grievances on the implementation of the programme raises questions about the awareness level of the beneficiaries in the programme. In this backdrop, it is worthwhile to examine whether the low awareness level of beneficiaries poses a serious constraint to the success of the programme, as reflected

in the low incidence of workers' participation and huge delays in wage payment. Hence, our attempt next is to understand how far improving the awareness level can influence the performance of the programme. In doing so, we also explore the role of availability of outside job options on the decision of workers to participate in MGNREGA. To implement this, we undertook a fieldwork among a sample of MGNREGA households in the North District of Sikkim, the district that exhibited the fastest decline among the four districts in terms of the selected indicators capturing the performance of MGNREGA.

### **4.3 Case Study of North Sikkim: Data and Methods**

#### **4.3.1 Primary Survey**

To address the objectives discussed above, the study undertook a primary survey among the households who have availed employment through MGNREGA in the North District. In all, the study had identified 120 households from the North District for the survey. The study employed a two-stage sampling procedure to identify the final respondents. The first stage involved selection of Gram Panchayats (GPs). To select the GPs, the study ranked the GPs using a backwardness indicator, namely the number of Below Poverty Line (BPL) households (Table 4.3). Next, we constructed four subsamples (highlighted in different colours in Table 4.4) based on the ranking and selected 4 GPs from bottom two subsamples of the district. The selected GPs were Mangshila Tibuk, Men Rongong, Lum Gor and 14/Lingthem-Lingdem. The next stage involved selection of households from the selected GPs. To identify the respondents, random sampling method was applied to the list of MGNREGA beneficiaries obtained from respective GPs. The study surveyed 30 households from each GP.

**Table 4.3 Stages of Sampling Strategy**

Subsamples based on the Ranking							
Sr N.o.	Total HH	BPL Households	Percentage	Rank	District	Block	Name of the Gram Panchayat Unit (GPU)
1	2	3	4	5	6	7	8
1	818	88	10.76	1	North	Kabi Tingda	Rongong Tumlong
2	221	33	14.94	2	North	Mangan	Tingchim Chadey
3	537	84	15.65	3	North	Kabi Tingda	Navay Shotak
4	1273	246	19.33	4	North	Kabi Tingda	Kabi Tingda
5	194	39	20.11	5	North	Dzongu	Passindang Saffo
6	546	122	22.35	6	North	Mangan	Ringhim Nampatam
7	209	48	22.97	7	North	Dzongu	18/Lingdong Barfok
8	590	139	23.56	8	North	Chungthang	Lachung Dzumsa
9	349	95	27.23	9	North	Mangan	Namok Sheyam
10	216	62	28.71	10	North	Mangan	Ramthang Tangyek
11	263	79	30.11	11	North	Mangan	Tung Naga
12	364	148	40.66	12	North	Kabi Tingda	Lingdok Nampong
13#	511	217	42.47	13	North	Mangan	Mangshila Tibuk
14	225	103	45.78	14	North	Chungthang	Tshunthang
15	284	130	45.78	15	North	Kabi Tingda	Phensang
16	278	130	46.77	16	North	Mangan	Sentam
17	211	105	49.77	17	North	Chungthang	Ship Gyer
18#	405	207	51.12	18	North	Kabi Tingda	Men Rongong
19	169	87	51.48	19	North	Dzongu	Tingvong
20	130	68	52.31	20	North	Dzongu	Sakyong Pentong
21	282	156	55.32	21	North	Dzongu	19/Hee-Gyathang
22	441	249	56.47	22	North	Chungthang	Lachen Dzumsa
23#	332	203	61.15	23	North	Dzongu	Lum Gor
24#	176	162	92.11	24	North	Dzongu	14/Lingthem-Lingdem

**Note:** # stands for the GPs finally selected in the first stage.

**Source:** Village Development Action Plan (RM&DD) and MGNREGA Gram Panchayat Pro-Poor Perspective Plan, G5P (RM&DD)

### 4.3.2 Methodology

#### Measurement of Variables

One of the main challenged that we faced in addressing the main objectives of this study was to find ways to measure the main variables, namely *awareness* and *efficacy*.



As it was difficult to measure them directly, we resorted to an indirect route to capture these two dimensions.

*Awareness:* In the context of this study, awareness implies whether the beneficiaries are aware of the various components and provisions available under the Act. Thus, in order to capture this aspect, the study constructed an index using four indicators, which are dichotomous in nature, that are likely to have a bearing on the awareness level of the households employed through MGNREGA. These indicators are as follows:

- (a) Whether they are aware of the Act? (1 for Yes and 0 for NO)
- (b) Whether they are aware of mandatory provision of number of days of employment under MGNREGA? (1 if they say 100 days and 0 otherwise)
- (c) Whether they are aware of the provision regarding the payment of wages? (1 if say compulsory wage payment within 15 days of work completion and 0 otherwise)
- (d) Whether they are aware of the unemployment allowance under the programme? (1 if they say that entitlement of employment allowance in the absence of job provision within 15 days of seeking employment and 0 otherwise)

The study constructed the index by assigning equal weights to all these four indicators of awareness. This implies that the value of the index will range between 0 and 4, and a value of 0 indicates absence of awareness about any of the provisions under the Act. If a person is aware of all the four indicators, then the index takes the value 4.

*Efficacy*: Our conjecture is that considerable delay in wage payment and lesser participation of people in the programme can significantly affect the efficacy of MGNREGA. Keeping this in view, the study considered these two indicators as proxies to capture the efficacy of the programme in the study area. The study collected information from each respondent on the number of days of delay in wage payment and the number of days employed under the programme.

### **Empirical Specification**

The main objective is to assess whether the efficacy of the programme depends on the awareness level of the households participating in the programme. We employ econometric analysis to formally test the role of awareness on efficacy, and our model takes the following form:

$$EFF_i = \beta_0 + \beta_1 AL_i + \sum_{j>1} \gamma_{j>1} HH_i + e_i \quad (4.1)$$

where *EFF* stands for efficacy of the programme. As our proxies for efficacy are number of days of employment and delays in wage payment, we used them alternatively as our dependent variable in our estimations. *AL* is our variable of interest, which stands for level of awareness of worker participated in MGNREGA. The coefficient of  $\beta_1$  would therefore capture the effect of awareness on efficacy. A negative and significant coefficient of  $\beta_1$  for delay in wages will indicate that higher the awareness level, lesser will be the delays in wage payment. A positive and significant coefficient of  $\beta_1$  for days of participation would indicate that higher the awareness level higher will be the participation of workers in MGNREGA. As mentioned before, it is very much likely that the awareness level depends on the socio-economic conditions of the participants. Therefore, we include *HH* in equation 4.1 to control for their influences on the efficacy of the programme. As a robustness

test, we also employed Instrumental Variable method (IV) estimation to precisely capture the effect of awareness on efficacy. We worked with a dataset containing 120 observations.

#### **4.4 Descriptive Statistics**

We first briefly discuss about the major features of the data collected through the fieldwork. As is evident from Table 4.4, more than 70 per cent of the respondents in our sample were male workers.  $2/3^{\text{rd}}$  of the workers were aged 50 years or below. Illiterates constituted 30 per cent of our sample, and only about 17 per cent in our sample had educated beyond higher secondary. 53 per cent of our respondents came from nuclear family and 47 from joint family. As expected, STs constituted major chunk of our respondents in our sample (7.5 per cent). Majority of the respondents cited agriculture as their major source of income, and about 54 per cent mentioned their housing condition as Kutcha. Majority of them felt that they experienced an improvement in living standard after getting employed under MGNREGA. This is interesting given the fact that the reliance on MGNREGA for livelihood by people in the North Sikkim is found to have declined in later years.

On the questions relating to awareness too, we find that majority of the respondents were unaware of the various provisions available under the Act. Though all the respondents mentioned that they have heard about the Act, only  $1/5^{\text{th}}$  of them could precisely spell out the exact year of implementation of the Act (Table 4.5). With respect to the other indicators to capture the awareness level of beneficiaries too, majority of the beneficiaries stated that they are unaware of these provisions under the Act.

**Table 4.4 Summary Statistics: General Characteristics**

<b>Variable</b>	<b>Share (in Per cent)</b>
<b>Gender</b>	
Male	74.2
Female	25.8
<b>Age Composition</b>	
20-29	15.8
30-39	27.5
40-49	24.2
50-59	18.3
60-69	8.3
70-79	5.0
80-89	0.8
<b>Educational Status</b>	
Illiterate	30.8
Primary	21.7
Secondary	30.8
Higher-Secondary	16.7
<b>Family Structure</b>	
Nuclear	52.5
Joint	47.5
<b>Caste</b>	
ST	97.5
Others/General	2.5
<b>Source of Income</b>	
Agriculture	83.4
Housewife	8.3
Other	8.3
<b>Housing Condition</b>	
Pukka	45.8
Kutchha	54.2
<b>Improvement in Living Standard</b>	
Yes	95.8
No	4.2

**Source:** Author's estimates from primary survey data.

**Table 4.5 Summary Statistics: Awareness Level of Beneficiaries**

<b>Variable</b>	<b>Share (in Per cent)</b>
<b>Aware of the MGNREGA Act</b>	
Yes	100
No	0
<b>Year of Implementation</b>	
Prior to 2006	14.9
2006	20.8
After 2006	64.3
<b>Aware of the Mandatory Provision of Employment under MGNREGA</b>	
Yes	54.0
No	46.0
<b>Aware of the Unemployment Allowance under MGNREGA</b>	
Yes	7.0
No	93.0

**Source:** Author's estimates from primary survey data.

As regards to participation in MGNREGA, on average, the respondents were employed for 88 days in a year (Table 4.6). About 73 per cent of the respondents could get employment through MGNREGA for 80 to 90 days, while only 2.4 per cent of the respondents could achieve the stipulated 100 days more ceiling. Though the Act clearly spells out that the workers should be provided with employment within 15 days of applying for a job, our sample respondents had to wait for, on average, 57 days to get the job through MGNREGA. Not less than 3/5<sup>th</sup> of the respondents waited for more than 30 days to obtain a job under the programme. This could also be one of the reasons why there is a lesser participation of workers in MGNREGA related jobs lately.

**Table 4.6 Summary Statistics: Participation in MGNREGA**

<b>Variable</b>	<b>Share (in Per cent)</b>
<b>Number of Days Employed</b>	
0 - 19	2.5
20 – 39	4.2
40 – 59	13.3
60 – 79	5.0
80 – 99	72.5
100 – 119	0.8
140 – 159	0.8
160 - 179	0.8
<b>Number of Days Waited</b>	
Less than 30 days	38.3
30 - 59	40.0
60 - 89	17.5
90 - 119	0.8
120 - 149	0.8
150 - 179	1.7
180 - 209	0.8
<b>MGNREGA: Seasonal or off-seasonal</b>	
Seasonal	61.7
Off-Seasonal	38.3

**Source:** Author's estimates from primary survey data.

Another interesting observation that emerges from our fieldwork data is the differences in wages paid to the beneficiaries. Though the wages are fixed at the state level, the respondents are made payments based on different wage rates (Table 4.7). In addition to the differences in wage rates, there has been also a considerably delay in the payment of wages to the beneficiaries. Majority of the respondents had to wait

longer to get their payments in their bank account. Our estimates suggest that 90 per cent of the respondents got their payments delayed by more than 30 days. Despite the huge delays in wage payment, none of the respondents mentioned that they got compensated for the delays in wage payment, though the Act clearly spells out the norms for compensation if there is a delay. The respondents also opined that, due to these delays, they had to rely on the financial support from their friends and relatives for managing their family expenses. These observations clearly suggest that the beneficiaries are less aware of the various provisions under the Act, thereby affecting the efficacy of the programme in terms of lesser participation of workers and delays in wage payment.

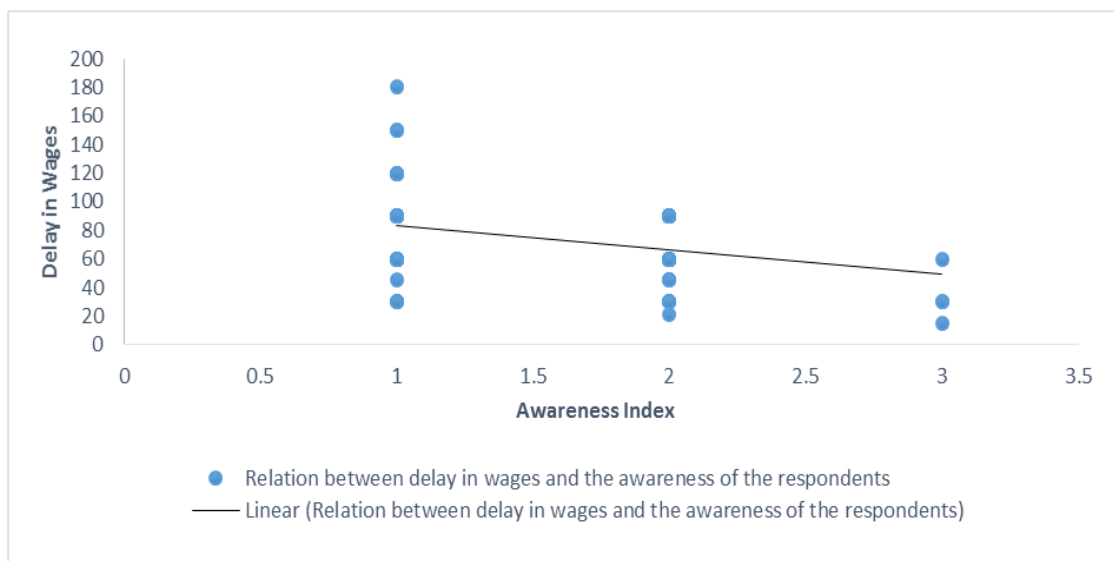
**Table 4.7 Summary Statistics: Payment of Wages**

<b>Variable</b>	<b>Share (in Per cent)</b>
<b>Wage Rate (in Rs)</b>	
81.00 - 100.00	6.7
101.00 - 120.00	3.3
121.00 - 140.00	47.5
141.00 - 160.00	34.2
161.00 - 180.00	8.3
<b>Delay in Wage Payment (Days)</b>	
Less than 30 days	10.0
31 - 60	40.0
61 - 90	41.7
91 - 120	3.3
121 - 150	3.3
151 - 180	1.7
<b>Availability of Other Job Options</b>	
Available	99.2
Not Available	0.8

**Source:** Author's estimates from primary survey data.

There is evidence to show that efficacy is systematically linked to level of awareness of beneficiaries. This relationship between awareness level and efficacy is better captured in Figures 4.1 and 4.2. As conjectured, Figure 4.1 shows a negative relationship between delay in wages and Awareness index, thereby suggesting that higher the level of awareness lower will be the delays in wage payment. On the other hand, in Figure 4.2, we observed a negative relationship between participation of workers and level of awareness indicating a positive relationship between the two. The descriptive analysis is suggestive and therefore, demands a much deeper analysis of the potential interactions between awareness and efficacy, which is examined next.

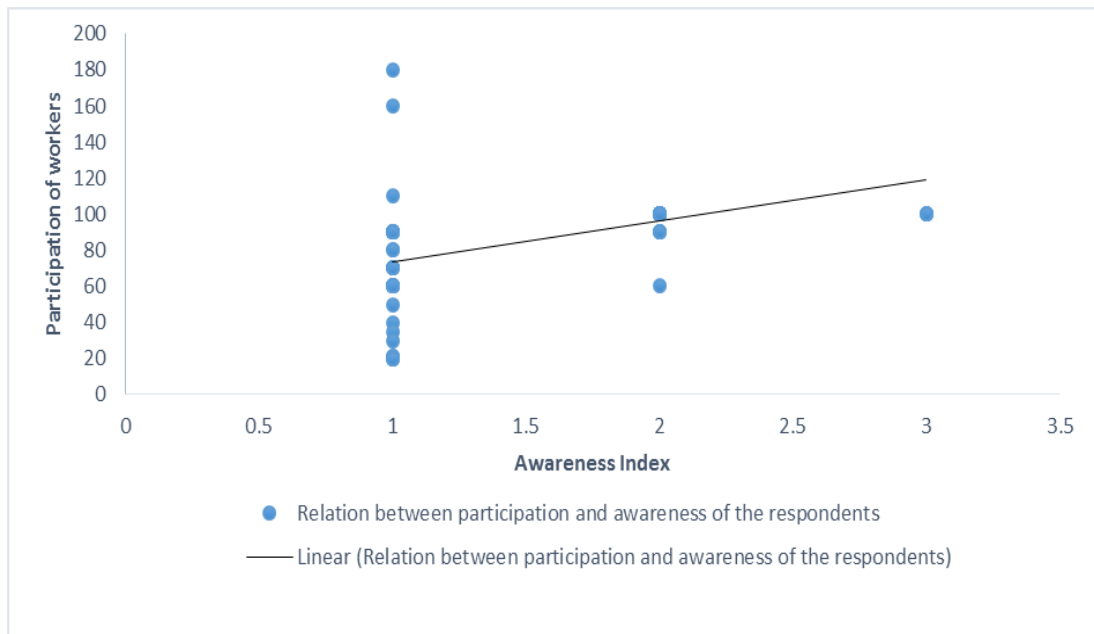
**Figure 4.1 Relation between Delay in Wage Payment and Awareness of Respondents**



**Source:** Author's estimates.



**Figure 4.2 Relation between Participation and Awareness of Respondents**



**Source:** Author's estimates.

#### **4.5 Awareness Level and Efficacy**

We now discuss the empirical results of our econometric analysis. We first discuss the results for our OLS estimations in Table 4.8. As discussed earlier, we use two proxies to capture the efficacy of the programme, days of participation of workers and delays in wage payment. We estimated equation (4.1) separately for these two proxies of efficacy: first with wage payment delay as the dependent variable and then with days of participation as the dependent variable. We present the OLS estimates for both estimations in columns 1-2 of Table 4.8. Our results clearly suggest that awareness level and efficacy are positively related. In column 1, the coefficient of awareness level is negative and significant at 1 per cent level suggesting that higher awareness level of beneficiaries is associated with significant reduction in wage payment delays. Our computations suggest that, on average, a one percent increase in awareness level would result in 0.25 percent decline in wage payment delays. In column 2, we present

the results for days of participation as the dependent variable. Results of this estimation too unequivocally confirm the significant role of awareness level in improving the efficacy of programme. The coefficient of awareness level is positive and significant at the 1 per cent level suggesting that greater awareness level of beneficiaries leads to an increase in the days of participation of workers in MGNREGA. Comparing the magnitude of coefficient of awareness level in columns 1 and 2, we find that increasing the awareness of beneficiaries about the various provisions of the Act would make a much deeper impact on number of days of participation of beneficiaries in MGNREGA. According to our estimates, a one percent increase in awareness level will lead to 0.36 per cent increase in number of days of participation of workers in MGNREGA.

**Table 4.8 OLS and IV Regression Results**

Variables	OLS		IV	
	(1)	(2)	(3)	(4)
	Dep Var: Wage payment delay	Dep Var: Days of Participation	Dep Var: Wage payment delay	Dep Var: Days of participation
AL	-0.252*** (0.064)	0.356*** (0.055)	-0.238*** (0.074)	0.407*** (0.073)
Constant	4.627*** (0.1104)	3.841*** (0.0940)	4.604*** (0.123)	3.758*** (0.144)
N	120	120	120	120
R <sup>2</sup> /Pseudo R <sup>2</sup>	0.114	0.261	0.114	0.256
F stat	15.25***	41.8***	10.35***	30.43***

**Note:** The coefficients of controls and instruments were suppressed to conserve space. \*\*\* stands for 1% level of significance.

**Source:** Author's estimates.

### **Correlates of Awareness**

We discussed earlier that Awareness Index is likely to be endogenous, as awareness of the participants depends on the socio-economic characteristics of participants of MGNREGA. This is clearly evident from Table 4.9, which presents the correlates of awareness. Results show that family structure, family size, gender, age and education level significantly affect the awareness level of the beneficiaries. We find that the awareness level of the individual staying in a joint family is higher than the awareness level of person from nuclear family. Holding all the other variables constant, the awareness level of male worker is higher than the female worker by about 11 per cent. As the age of the beneficiary's increases by one year on an average, the awareness level decreases by 2 per cent. This may be due to the fact that as elder people are less keen on knowing about the various provisions under the program. The coefficient of education variable suggests that the average awareness increases by about 7 per cent for every additional year of education, *ceteris paribus*. As we all know that if a person is literate then his/her intention to know things is higher to that of illiterate people. These results clearly suggest that the awareness of a worker crucially depends on his/her socio-economic status.

**Table 4.9 Correlates of Awareness**

Dependent Variable: Awareness Index

<b>Variables</b>	<b>Coefficients</b>
Family Structure	0.129** (0.062)
Family Size	0.032** (0.016)
Housing Condition	-0.031 (0.046)
Gender	0.106** (0.053)
Age	-0.019*** (0.002)
Education Level	0.072*** (0.012)
Source of Income	-0.065 (0.061)
Social Group	0.119 (0.143)
Constant	1.902*** (0.215)
No. of Observation	120
R <sup>2</sup>	0.824
F	65.29***

**Note:** \*\*\* and \*\* stands for 1% and 5% level of significance respectively**Source:** Author's estimates

### **Robustness Test: Correcting for Endogeneity**

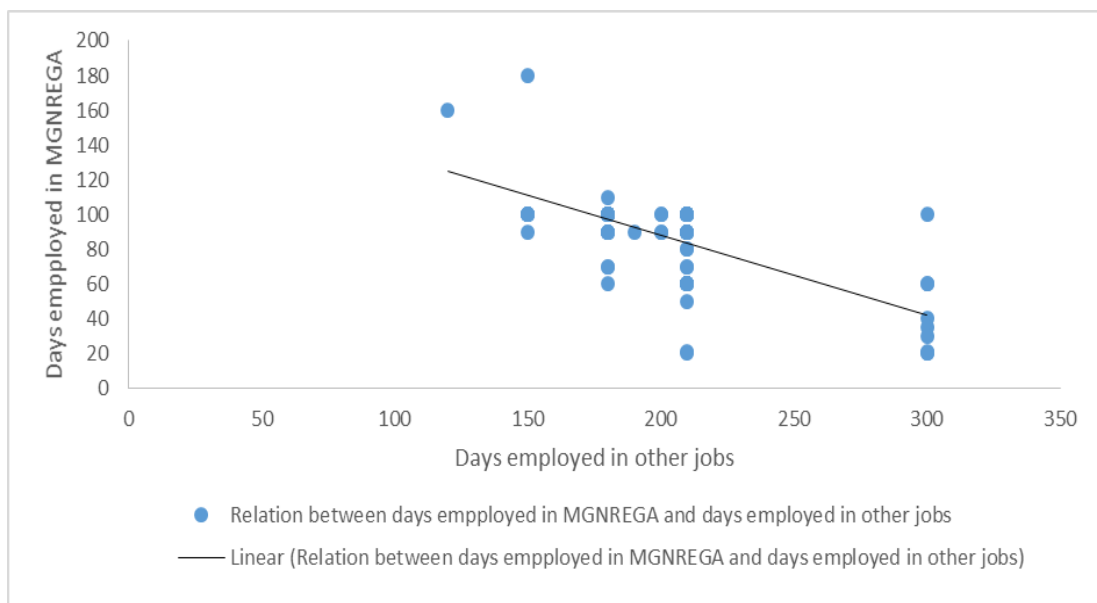
For reasons mentioned earlier, we also consider the potential endogeneity of our measure of awareness. Therefore, it could be possible that the endogenous nature of the awareness variable may be affecting its influence on efficacy. To address this possible endogeneity bias, we estimate equation (4.1) using Instrumental Variable (IV) method. We present IV results in columns 3-4 of Table 4.8. For IV estimations too, we follow the same order of specifications that we estimated using OLS. We find that the positive influence of awareness level of workers on efficacy is intact, even after correcting for the endogeneity. Our awareness level variable is negatively influencing wage payment delays and positively influencing days of participation of workers. Our findings are thus essentially robust to endogeneity concerns, and we can be rather confident that the improving the awareness level indeed increases the efficacy of the programme.

### **Outside Job Options and Workers' Participation in MGNREGA**

It is also important to see how the availability of outside job options to the workers influences workers' participation when the performance of the programme is relatively poor. In the presence of outside job options, there is a greater likelihood that the possible beneficiaries of MGNREGA may be opting for these options. In other words, the presence of these outside job opportunities present the workers with an opportunity to weigh the possible benefits of opting for jobs outside MGNREGA and jobs through MGNREGA. Issues like delays in wage payments and absence of unemployment allowance in case the applicant has to wait long for getting a job, as observed through our fieldwork, can significantly influence the decision of workers to opt for jobs outside MGNREGA.

We perform a simple correlation exercise to see whether outside job options significantly influence the decision of workers to participate in MGNREGA. The scatter plot presented in Figure 4.3 supports our conjecture, and suggests that outside job options are likely to influence the participation of workers in MGNREGA. It may not be sufficient to arrive at a precise conclusion on the possible relationship between the two as it is very much possible that the several weaknesses of the programme such as payment delays and absence of payment delays are actually driving the participants' decision to look for jobs outside the MGNREGA. One needs to carry out a much more comprehensive analysis to address this issue, which can be an area for further research.

**Figure 4.3 Relation between Participation of Workers in MGNREGA and Other Job Options**



**Source:** Author's estimates.

## **4.6 Conclusion**

In this chapter, we examined whether the low awareness level of beneficiaries poses a serious constraint to the success of the programme, as reflected in the low incidence of workers' participation and huge delays in wage payment. As the information required to address this research question is not available from secondary sources, we undertook a fieldwork among a sample of MGNREGA households in the North District of Sikkim, the district that exhibited the fastest decline among the four districts in the state of Sikkim in terms of the selected indicators capturing the performance of MGNREGA.

We employed econometric analysis to formally test the role of awareness on efficacy. Two proxies are used to capture the efficacy of the programme, days of participation of workers and delays in wage payment. Our results unequivocally confirmed the significant role of awareness level in improving the efficacy of programme. As the awareness variable is likely to be endogenous, we accounted for this endogeneity bias influencing our result by employing Instrumental Variable (IV) method. Our findings are robust to endogeneity concerns, and we are confident in concluding that improving the awareness level of workers result in better performance of MGNREGA. Our analysis also suggested that outside job options are likely to influence the participation of workers in MGNREGA.

## CHAPTER 5

### SUMMARY, CONCLUSIONS AND POLICY SUGGESTIONS

In this chapter, the forgoing discussion is summarized and the major conclusions are highlighted. Additionally, the policy inferences that can be drawn from the study, the limitations and directions for future research are also indicated. The present study has made an attempt to investigate the factors that are likely to influence the performance of the programme in the state of Sikkim. In doing so, the study specifically looked at the role of lack of awareness of beneficiaries in influencing the low effectiveness of the programme, as reflected in the low incidence of workers' participation and huge delays in wage payment. Alongside, the study also analysed whether the awareness level of workers is influenced by their socio-economic status. Further, the relationship between availability of outside job options and the participation of workers in jobs emanating from MGNREGA is also examined.

Despite the implementation of MGNREGA in 2006, there is dearth of a systematic study evaluating the performance of the programme and locating the factors that are likely to explain its performance in the context of North-Eastern Region of India. This study is an attempt to fill this obvious gap in the literature.

The study is based on data from secondary and primary sources. The secondary data are obtained largely from the official website of the Mahatma Gandhi National Rural employment Guarantee Act 2005 ([www.nrega.nic.in](http://www.nrega.nic.in)) of the Ministry of Rural Development, Government of India, and are collected for the period, 2006-2015. To capture the role of awareness on effectiveness, one needs to have information on variables that can best capture the level of awareness and efficacy. As information on variables that can best represent these two dimensions is not available from the



secondary sources, a fieldwork among the selected households in North District of Sikkim is carried out.

The empirical analysis is based on growth rates, percentages and correlation exercises represented through tables and charts. In order to examine the role of awareness on efficacy of the programme, a regression function is fit to the sample data. Besides estimating ordinary least squares, the study also examined this question by employing instrumental variable (IV) method so as to correct for the possible endogeneity bias associated with the awareness variable.

### **5.1 Summary of the Findings**

The comparison of performance of North-Eastern states in selected socio-economic indicators (**Chapter 2**) showed that, Sikkim though smallest (in terms of area and size of the population) in the region, seems to have performed better in majority of selected socio-economic indicators. The state has witnessed considerable increase in its per capita income in the last three decades to reach on the top among the North-eastern states, and also recorded growth rates significantly higher than the national average. The significant growth the state has experienced has also helped to make a marked dent on poverty. In terms of poverty reduction, the state is found to be the best performing states not only in NER but also in India. In terms of unemployment too, the state is placed comparatively in a much better position, and the unemployment rates among women are considerably lower than that of male workers. The analysis undertaken in this chapter clearly displayed the edge the state of Sikkim had in many socio-economic indicators over other states in the NER.

Our conjecture is that states with higher development levels to be better able to implement MGNREGA, since a higher level of development might indicate the ability

of a state bureaucracy to run complex programs effectively. Hence, using a selected key performance indicators, we carried out an analysis to understand the status of implementation and performance of MGNREGA in the North-Eastern states in **Chapter 3**. In order to examine the performance of MGNREGA over time, we divided the whole period into two sub-periods, 2006-2011 and 2011-2015, and then compared the performance of the programme between the two sub-periods. Our analysis possibly indicates that the euphoria and excitement generated in the initial years of MGNREGA seem to have given way to cynicism in the later years of the programme. Evidence shows that the percentage of households who have relied on MGNREGA for employment has declined between the two sub-periods. The average person days generated in a year too witnessed a decline in most of the states in the region. Empirical evidence also points to substantial decline in the share of households engaged in MGNREGA jobs for 100 days. In fact, a meagre 1/10<sup>th</sup> of the households employed through MGNREGA could only find job for 100 days in the NER.

The increasing participation of women that we found in the first five years of implementation of the programme seems to have disappeared in the later years, and the programme failed to generate even the mandatory provision of 1/3<sup>rd</sup> employment to women. The share of SCs and STs in person days too witnessed a decline between the two sub-periods. It is also evident from our analysis that delay in wage payments is a serious issue in all the states in NER, and more than half of the transactions are delayed by more than 15 days, in majority of the states. We observe that, despite the significant delay in wage payments and absence of payment of unemployment allowance, the number of complaints and grievances received in each state seem to be considerably low. The lack of awareness among the beneficiaries on the various

provisions under the Act possibly driving the higher incidence of wage payment delays and non-payment of unemployment allowance, thereby resulting in lesser participation.

Hence we examined whether the low awareness level of beneficiaries poses a serious constraint to the success of the programme, as reflected in the low incidence of workers' participation and huge delays in wage payment (**Chapter 4**). The information is gathered from a fieldwork among a sample of MGNREGA households in the North District of Sikkim, the district that exhibited the fastest decline among the four districts in the state of Sikkim in terms of the selected indicators capturing the performance of MGNREGA. Results of our econometric analysis clearly suggest the significant role of awareness level in improving the efficacy of programme. This implies that the lesser participation of workers and delay in wage payment can be addressed to a greater extent if there is a greater awareness about the Act among the beneficiaries. We also corrected for the possible endogeneity bias influencing our result by employing Instrumental Variable (IV) method, and found that our results are robust to endogeneity concerns. Our results also suggested that the outside job options are also likely to influence the participation of workers in MGNREGA.

## **5.2 Policy Suggestions**

The inferences drawn from the present study as well as the evidence in available literature are used to make the following policy recommendations.

(1) As we find that the lack of awareness is influencing the efficacy of the programme, it is imperative that efforts should be taken to make the beneficiaries aware of the various provisions under the Act. Hence it is important that the Government organises intensive training and awareness building programmes for the

officials and workers to educate them about the various provisions under the programme. It is also beneficial to sensitise the people at the grass roots level about RTI Act and its use and encourage them to use it.

(2) As suggested by Rao (2010), the non-governmental agencies (NGOs) and community based organisations can play a vital role in improving the performance of the programme. As the NGO involvement is very low in the state of Sikkim, there is a need to strengthen their participation. This can certainly help the programme in terms of their participation in activities like awareness campaigns, social audits, improving the accountability procedures and so on. The involvement of NGOs in monitoring the programme can also bring transparency in the implementation of the programme. The NGOs involvement will also help in improving the awareness level of beneficiaries by educating them about the various provisions available under the Act.

(3) Another finding that emerge from our analysis is the decreasing participation of women in MGNREGA related jobs over time. Hence increasing the participation of women is essential for achieving the goal of women empowerment. One solution is to increase the participation of women in Gram Sabhas, which at present is very low as is evident from our fieldwork. We believe that their participation can be increased if they are more aware of their citizenship rights and duties. As suggested by Kar (2013), investing in informal groups can be a solution to achieve this objective. Though the Act talks about the need for investing in training of elected leaders, democratic processes necessitate active citizenship by all, which needs to get figured in resource allocations too (Kar, 2013). Investing in such informal groups would also help programme managers to understand local priorities from women's perspective and beyond those discussed in gram sabha.

(4) In relation to increasing the women participation in MGNREGA, another factor that needs to be taken care of is improving the quality of child care. Though it is recommended that mobile creches need to be provided at work places, the issue of its quality has to be kept in mind.

(5) Forming strict grievance redressal mechanisms for reporting of violations and issuing corrective action is the need of the hour. Though these are in place, either they are not operational or beneficiaries are not aware about the availability of such mechanisms for filing their complaints.

### **5.3 Limitations and Scope for Further Work**

One limitation of the study is the use of delays in wage payment as well as the participation of workers as proxies for the efficacy of the programme. It is very much possible that the delays in wage payment can be a factor that actually drives a worker's decision to participate in the programme. In this context, our econometric analysis should be bringing in delays in wage payment as one among the explanatory variables, than a variable capturing the success of the programme. However, one may argue that as workers' subject to various future uncertainties, they may view their labor in NREGA as a nonstandard precautionary mode of saving income which pays a secure return after the payment lag is completed. Thus greater income uncertainty may encourage more NREGA work participation. Hence, wage payment delays need not influence participation of workers but a reflection on the effective implementation of the programme in a state.

One possible avenue for future research that emerge from our analysis is to examine the role of financial institutions or the presence of money lenders influencing the decision of workers to participate in NREGA, in the face of significant delay in wage

payments. If the NREGA wage offer does not sufficiently compensate the workers for the payment delay in meeting his subsistence requirement and future income uncertainty, it may lower the bargaining power of the rural workers in the local labour market by pushing them to accept a low wage or agree on a loan contract with local money lenders at an exorbitant interest rate.

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**APPENDIX**

**IMPACT OF AWARENESS ON THE EFFICACY OF MGNREGA: A STUDY  
OF NORTH SIKKIM.**

**Questionnaire for field survey of individual household**

Name of investigator: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

Name of the respondent:

\_\_\_\_\_

Are you a BPL Card holder?  Yes  No

A. Name of State: \_\_\_\_\_

B. Name of the District: \_\_\_\_\_

C. Name of the Block: \_\_\_\_\_

D. Name of the Gram Panchayat Unit (GPU):

\_\_\_\_\_

E. Name of the Ward: \_\_\_\_\_

F. House No: \_\_\_\_\_

1. Family structure:  Joint family  Nuclear family

2. How many members of family do you have? \_\_\_\_\_

3. Housing condition (Kuccha or Pukka) \_\_\_\_\_

Sr. No	Name	Caste	Relation	Gender	Age	Education	Source of Income	Yearly income (approx.)	
								NREGA	Others
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

4. Are you aware of NREGA?

5. For you, when was it implemented in Sikkim?

6. How many days in a year are you being employed under NREGA?

7. How much are you being paid under NREGA?

8. How did you apply for NREGA?

9. How many days did it take to get employment, after applying for it?

10. If you apply for employment, what is the limiting days set by law to give work to the beneficiaries?

11. Have you heard about the unemployment allowance? If yes, explain.

12. Did you get any receipt from the Gram Panchayat stating that they have receive your application against which the guarantee of providing employment?

13. If no, did you receive any unemployment allowance for the period when you have not been employed? And at what rate?

14. What is the mode of information?

15. Is NREGA seasonal or off-seasonal? Explain.

16. In which months the work is done?

17. Are there any outside job opportunity, other than the Act?

A. Yes

B. No

18. If yes: please describe in detail?

Work:

Wage (per day):

How many days (approx.):

Which month:

19. If you get higher wages in outside job, would you stop working under NREGA? If yes, why?

20. How are you being paid?

21. Do you have to wait long for payment, after the end of the working period? If yes, for how many days?

22. What is the limiting days set by law for beneficiaries' payments?

23. How much should be the delay allowance?

24. Did you get any allowance? If yes, how much and for how many days?

25. How do you manage your living, during these days? Explain.

Work:

Any work (owned or others):

Wage (per day):



How many days (approx.):

Which month:

26. Whether you get any financial support from friends or relatives to compensate for the delay in wage payments?

27. Did you take any support from banks or other institutions? If yes, how?

28. Are there people depending on money lenders? What about you?

29. If yes, whether you depend on them for compensate for the payment delay?

30. How much would you get and at what interest rate?

Friend: Interest rate:

Relative: Interest rate:

Money Lender: Interest rate:

Bank: Interest rate:

Other: Interest rate:

31. What is the distance of the nearest bank/post office from your place of residence?

32. How many times do you visit the post office/bank?

33. Before NREGA, what was your source of income?

34. What is the difference in Income? (approx.)

Before NREGA (yearly):

After NREGA (yearly):

How much from NREGA (yearly):

35. Were you able to improve your “living standard” after getting employment under NREGA? If yes, how?

36. Do you think this NREGA Scheme should be continued in the days to come? If yes, state reasons.

37. If no, state reasons

38. Remarks: