

**THE ROLE OF SARVA SHIKSHA ABHIYAN IN  
ACHIEVING EDUCATION FOR ALL (EFA):  
A STUDY OF RURAL & URBAN AREAS OF  
JALPAIGURI DISTRICT**

**A Thesis submitted to the UNIVERSITY OF NORTH BENGAL**

**For the Award of**

**DOCTOR OF PHILOSOPHY (PH.D)**

**in**

**ECONOMICS**

**By**

**ARINDAM METIA**

**GUIDE**

**Prof. (Dr. ) ANIL BHUIMALI**

**And**

**CO-GUIDE**

**Dr. SWAPAN KUMAR RAKSHIT**

**Department of Economics**

**University of North Bengal**

**Raja Rammohunpur, Darjeeling**

**November 2018**

# UNIVERSITY OF NORTH BENGAL

Accredited by NAAC with Grade A

DEPARTMENT OF ECONOMICS



ENLIGHTENMENT TO PERFECTION

P.O. NORTH BENGAL UNIVERSITY  
Raja Rammohunpur, Dt. Darjeeling,  
Pin-734013, West Bengal, India  
Tel. : 0353-2580226  
Fax : 0353-2699001  
E-mail : nbueco2009@gmail.com

## CERTIFICATE

We certify that Mr.Arindam Metia has prepared the thesis entitled “The Role of Sarva Shiksha Abhiyan in Achieving Education for All (EFA): A Study of Rural & Urban Areas of Jalpaiguri District”, for the award of Ph.D degree of the University of North Bengal, under our guidance. He has carried out the work at Department of Economics, University of North Bengal.

*Anil Bhuimali*  
Prof. Anil Bhuimali 20.11.2018  
Department of Economics  
(Guide)

*Swapan Kr. Rakshit*  
20.11.18  
Dr. Swapan Kr. Rakshit  
Deputy Registrar  
University of North Bengal  
(Co-Guide)

Professor  
Department of Economics  
University of North Bengal

## Urkund Analysis Result

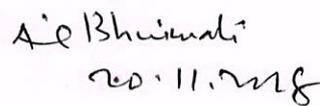
Analysed Document: Arindam Metia\_Economics.pdf (D44016127)  
 Submitted: 11/15/2018 8:54:00 AM  
 Submitted By: nbuplg@gmail.com  
 Significance: 5 %

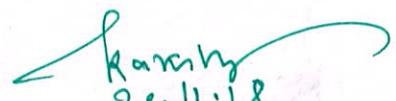
### Sources included in the report:

<http://14.139.13.47:8080/jspui/handle/10603/202244>  
<http://shodhganga.inflibnet.ac.in/handle/10603/203483>  
<http://14.139.13.47:8080/jspui/handle/10603/203270>  
<http://14.139.13.47:8080/jspui/handle/10603/205985>  
<http://14.139.13.47:8080/jspui/handle/10603/203857>  
<http://14.139.13.47:8080/jspui/handle/10603/202002>  
<http://14.139.13.47:8080/jspui/handle/10603/202081>  
<http://14.139.13.47:8080/jspui/handle/10603/205023>  
<http://shodhganga.inflibnet.ac.in/handle/10603/211938>  
[http://www.planningcommission.gov.in/reports/peoreport/peoevalu/peo\\_cmdm0106.pdf](http://www.planningcommission.gov.in/reports/peoreport/peoevalu/peo_cmdm0106.pdf)  
<http://purbamedinipur.gov.in/MDM/Mid-day-Meal%20Presentation.ppt>  
<http://sanhati.com/news/274/>  
[http://www.thefullwiki.org/Jalpaiguri\\_district](http://www.thefullwiki.org/Jalpaiguri_district)  
[http://www.pratichi.org/sites/default/files/MDM\\_Birbhum.pdf](http://www.pratichi.org/sites/default/files/MDM_Birbhum.pdf)  
<http://www.mdm.nic.in/Files/PAB/PAB-2011-12/AWP-Write%20up/Assam.pdf>  
[http://www.mdm.nic.in/Files/PAB/PAB2013-14/West\\_Bangal/Appraisal\\_Note\\_WB.pdf](http://www.mdm.nic.in/Files/PAB/PAB2013-14/West_Bangal/Appraisal_Note_WB.pdf)  
<https://thesis.eur.nl/pub/15507/>  
[SBarik\\_I\\_moodledata\\_temp\\_turnitintool\\_784390666.\\_90\\_1385549305\\_2040.pdf](SBarik_I_moodledata_temp_turnitintool_784390666._90_1385549305_2040.pdf)  
<http://iesd.org.in/jesd/Journal%20pdf/2015-XI-1%20N.%20Karunakaran%20and%20Krishnaraji.T.pdf>  
[http://www.spandan-india.org/cms/data/Article/A2014415173536\\_1.pdf](http://www.spandan-india.org/cms/data/Article/A2014415173536_1.pdf)  
<http://www.scert.cg.gov.in/pdf/researchpapers/studyreports/MDM%20Chattisgarh%20Final%20Report.pdf>

### Instances where selected sources appear:

111

  
 20.11.2018  
**Professor**  
 Department of Economics  
 University of North Bengal

  
 20.11.18  
**Deputy Registrar**  
 University of North Bengal

  
 20.11.18

## DECLARATION

I declare that the thesis entitles "The Role of Sarva Shiksha Abhiyan in Achieving Education for All (EFA): A Study of Rural & Urban Areas of Jalpaiguri District" has been prepared by me under the guidance of Dr. Anil Bhuimali, Professor of Economics, university of North Bengal and co-guidance Dr. Swapan Kr Rakshit, Deputy Registrar, University of North Bengal. No part of this thesis has formed the basis for the award of any degree of fellowship previously.

*Arindam Metia*

[ARINDAM METIA]

Department of Economics

University of North Bengal

Raja Rammohanpur

Darjeeling-734013

Date *20.11.2018*

## Abstract

Sarva Shiksha Abhiyan (SSA) is the inclusive and integrated national programme for Universalisation of Elementary Education (UEE). The major role of UEE for strengthen social equity through provision of equal opportunities of education. With the introduction of National Policy on education (1986), India proposed a wide range of significant efforts to UEE and DPEP was the one of the schematic programmes to reduce the differences in enrolment, drop out and learning achievements among different social groups. DPEP has been extended to Sarva Shiksha Abhiyan in 2000 towards the achieving the goal of UEE. In the State of West Bengal, the programme is implemented by Paschim Banga Sarva Shiksha Mission (PBSSM) under the guidance of School Education Department, Government of West Bengal. Sarva Shiksha Abhiyan has entered its 18<sup>th</sup> year covering 20 educational districts of West Bengal. With the enactment of SSA, free cooked meals has been offered to the students in primary and upper primary schools with the aim to improve school enrolment, attendance and overall improving the educational scenario in the state. The study was carried out in eighty schools in Jalpaiguri Municipality (urban) and Rajganj (rural) to make a comparative analysis in between rural and urban areas of Jalpaiguri district. Research studies on the impact of SSA in this region are negligible. A total of 360 students, 6-11 years age group, studying in class from I-V, out of which 180 students from Jalpaiguri municipality and 180 students from Rajganj block. Eighty head teachers, 160 assistant teachers and 160 parents were interviewed. The present study was taken to make a comparative analysis between Jalpaiguri Municipality (urban) and Rajganj (rural) in terms of role of Sarva Shiksha Abhiyan. The major objectives of the study i) to study the historical background of MDM ii) To study the impact of MDM scheme in term of enrolment, family income, attendance, drop out, study behaviour and health issues of children. .iii) To study the hygiene factors of MDM. Infrastructure or civil works is one of the major parameter to influence the Sarva Shiksha Abhiyan (SSA) in achieving education for all. With the introduction of SSM; infrastructure is of great importance to achieve the goal of SSA. It is admitted that, effectiveness of the existing infrastructure for elementary education is the debatable & challenging issue. Currently, Sarva Shiksha Abhiyan (SSA) is implemented as India's main programme for

universalising elementary education. Its overall goals include universal access and retention, bridging of gender and social category gaps in education and enhancement of learning levels of children. SSA provides for a variety of involvements, including opening of new schools and additional classrooms, toilet and drinking water facilities and other necessary support for learning achievement. The present paper is an attempt to evaluate the role of civil works in SSA and also to emphasize the need for better infrastructure that would provide quality education in school centric environment. The present study is an attempt to know present status of civil works for the smooth running of the programme of SSA. The purpose of this study is to measure the infrastructure developments in terms of classrooms, playground, water facilities, boundary wall, etc.

The present study shows that the impact of MDM has contributed significantly on the overall achievement of SSA in Jalpaiguri Municipality and Rajganj block. The paper also highlighted the weaker areas of infrastructural development and learning procedure. Majority of the students were satisfied with the MDM scheme while parents in rural areas perceived that little and insignificant impact of MDM on the health of their children, attendance. Moreover, the paper was undertaken to evaluate enrolment, reduction in drop out, school attendance, study behaviour, quantity and quality of MDM, girls' enrolment and education & nutritional affect among the rural and urban schools in Jalpaiguri district. Lack of proper infrastructure, dining room, low attendance especially in urban areas and dull menu were found to be major obstacles in the success of SSA. The researches recommended that MDM should be provided with utmost care that students must feel that MDM is their human right and it can be possible through strong development of social network.

## Preface

Universalisation of Elementary Education (UEE) in India provides an opportunity to get an education to all children in the age group 6 to 14. Education is the fundamental right of every child. In this context, State shall make an effort to provide elementary education to all children irrespective of religion, sex, caste and economic status. A well-planned education programme was implemented to build internal, mental strength of the children through Sarva Shiksha Abhiyan. It is a flagship programme with time clear time-bound initiatives of Government of India for developing and strengthening the formal primary education system to achieve the goal of universalisation of elementary education. It is a joint venture programme of the state, Central Govt. and the local Govt to fulfil the demand for appropriate and constructive primary education for all children. The Sarva Shiksha Abhiyan has also acknowledged as the Education for All or 'Each one teaches one'. Since its beginning, Jalpaiguri district has been playing a significant role to expand universalisation of elementary education through Sarva Shiksha Abhiyan. The present study is an attempt to analyse the role of Sarva Shiksha Abhiyan in rural and urban areas of Jalpaiguri district.

The thesis has been divided into eight chapters. The **First chapter** deals with the present context of the study, the scope of the study, the importance of the study, statement of the problem, research area, research problems. It also includes the preliminary idea about the midday meal and limitation of the study. The **Second Chapter** covers a review of related studies which was already carried out by different academicians, educationalists, researchers, and policymakers in India and West Bengal. The **Third Chapter** discusses the theoretical orientation of the study. The **Fourth Chapter** explains the research methodology used for the study. The **Fifth Chapter** covers aspects such as historical perspective of MDM in India and Jalpaiguri district. The **Sixth Chapter** describes data analysis and interpretations. The **Chapter Seventh** discusses the impact of infrastructure facility in Sarva Shiksha Abhiyan in the Jalpaiguri district. The last or **Chapter Eighth** deals with the outcome of the present research work will be discussed along with the suggestions and conclusions.

# Acknowledgement

First and foremost, I am highly indebted to my supervisor Dr. Anil Bhumali, Honourable Vice Chancellor, Raiganj University, who has been kindly supervising me in completion of the thesis. His patience, guidance, motivation and immense knowledge helped me in all time of research and writing of this thesis. I am very grateful for his time, his sincere criticism and appreciation when required.

I offer my sincere gratitude to my co-guide Dr. Swapan Kr. Rakshit, Deputy Registrar, University of North Bengal, for his constant supervision, encouragement, guidance and support throughout my thesis and making the completion of this work possible. His compassionate attitude, scholarly guidance and keen interest in research work have encouraged me at every stage of completion of this thesis in time.

I would like to take the opportunity to express my heartfelt gratitude to Fr, Cherian Pedyara, former principal of North Bengal St. Xavier's College for permitting me to carry out this research. I wish to express to deepest appreciation to Fr Dr. Joseph Victor, Principal of North Bengal St. Xavier's college for his supportive encouragement.

I am also thankful to all the staff members of the District Primary School Council, Jalpaiguri for their assistance by providing the required material, data for the research.

I would also express my sincere thanks to all the head teachers, assistant teachers, students and parents who participated in the data collection process through questionnaire for this study.

I want to acknowledge Mr Asim Mitra my colleague for his valuable suggestion and guidance.

I am thankful to my wife Mrs. Anewasha Metia for her patience, understanding and believe in my efforts and for her constant support and prayer. I am fortunate in having Ahona my

daughter. She has lost a lot due to my continuous engagement in research. Without her understanding it would have been impossible for me to complete this work.

A research project is completed with the motivation, encouragement and help which we get from different people. I take the opportunity to express my sincere thanks to everyone who has contributed to my completion of thesis.

Finally I thank to Almighty God for showering blessing and completion of the thesis.

*Arindam Metia*

ARINDAM METIA

Date 20.11.2018

North Bengal University  
Department of Economics  
November, 2018

# Table of Contents

Abstract.....	i-ii
Preface.....	iii
Acknowledgement.....	iv-v
List of Tables.....	xiii-xvi
List of Figures.....	xvii
List of Abbreviations.....	xviii-xxi
List of Appendices.....	xxii
Chapter I: Introduction to Sarva Shiksha Abhiyan.....	1-23
1. Introduction.....	1
1.1 Present Context.....	3
1.2 Scope of the study.....	7
1.3 Importance of the study.....	12
1.4 Statement of the problem.....	13
1.5 Research Area.....	13
1.6 Research Problems.....	13
1.6.1 Infrastructure Problems.....	16
1.6.2 Components of infrastructure considerations for design, planning and implementations.....	17
1.7 Mid day meal programme.....	18
1.8 Limitation of the study.....	20
1.9 Chapterisation.....	21
Chapter 2: Literature Review.....	24-51
2.1 Introduction.....	24
2.2 Importance of review of related literature.....	24
2.3 Source of literature.....	26
2.4 Review of Literature.....	26
2.5 Over view of the Studies.....	48
2.6 Distinguishing features of the study.....	50
2.7 Rationale of the study.....	50
Chapter 3: Theoretical Orientations.....	52-76

3.1 Introduction.....	52
3.2 Importance of Elementary Education.....	52
3.3 History of Education in India.....	54
3.3.1 Pre British Period.....	54
3.3.2 Education in British Period.....	56
3.3.3 Education during Post Independence Period.....	57
3.4 Different Programmes of Elementary education.....	58
3.4.1 Secondary Education Commission.....	58
3.4.2 Kothari Commission.....	59
3.4.3 National policy on Education.....	59
3.4.4 Restructuring & Reorganisation of Teacher Education.....	59
3.4.5 Non-formal education.....	60
3.4.6 Mahila Samkhya Programme.....	60
3.4.7 Shiksha Karmi Project.....	60
3.4.8 Operation Black board.....	61
3.4.9 Programme of Early Childhood Care & Education.....	61
3.4.10 Lok Jumbish Project(People’s Movement).....	61
3.4.11 National Programme for Education of Girls at Elementary Level .....	62
3.4.12 Kasturba Gandhi Balika Vidyalaya Scheme.....	62
3.4.13 District Primary Education Programme.....	63
3.4.14 Education Cess and Mid Day meal Scheme.....	63
3.4.15 National Commom Mimimum Programme.....	64
3.4.16 some initiatives of Girls Education.....	65
3.5 Concept of Sarva Shikshya Abhiyan.....	66
3.5.1 Functions of Sarva Shiksha Abhiyan.....	67
3.5.2 Major Strategies to Sarva Shiksha Abhiyan.....	68
3.5.3 Basic Components of Sarva Shiksha Abhiyan.....	69
3.5.4 Organisational Structure of SSA.....	71
3.6 Perception of SSA in Rural & Urban Area.....	73
<b>Chapter 4: Methodology.....</b>	<b>77-89</b>
4.1 Introduction.....	77
4.2 Sampling Unit.....	77

4.3 Criteria for selection.....	78
4.4 Sampling Size and Sampling Techniques.....	80
4.4.1 Selection of Schools.....	80
4.4.2 Selection of students.....	81
4.4.3 Selection of parents of students .....	81
4.4.4 Selection of teachers of students.....	82
4.5 Pilot Study .....	82
4.6 Collection of data .....	83
4.6.1 Questionnaire for students .....	84
4.6.2 Questionnaire for parents.....	84
4.6.3 Questionnaire for teachers .....	84
4.7 Hypothesis Formulation.....	84
4.8 Data Analysis Techniques .....	86
<b>Chapter 5: Mid Day Meal in Jalpaiguri Municipality&amp;</b>	
<b>Rajganj Block.....</b>	<b>90-109</b>
5.1 Introduction.....	90
5.2 MDMs & Introduction in India.....	91
5.2.1 Mid day Meal under National Food Security Act,	
2013.....	96
5.2.2 Major Objectives of Mid Day Meal.....	97
5.3. Background of Mid day Meal programme in Jalpaiguri Sadar and	
Rajganj Block.....	98
5.4 Administrative Agencies of MDM at National, State, District and	
Village Level.....	99
5.4.1 National Level steering cum monitoring Committee.....	101
5.5 Perception of the students regarding Mid Day Meal Scheme.....	104
5.5.1 Regularity of the Mid Day Meal.....	104
5.5.2 Quality of the Food.....	104
5.5.3 Left over of MDM.....	105
5.5.4 Hygiene and safe issues of the MDM.....	106
5.6 Perception of the head teachers regarding Mid Day	
Meal Scheme.....	107

## Chapter 6: Evaluation of Mid Day Meal (Data Analysis and

Interpretation).....	110-155
6.1 Introduction.....	110
6.2 Variables.....	111
6.3 Hypothesis testing –Crosstab and Chi- square Test.....	112
6.3.1 Analysis of parent’s satisfaction in Jalpaiguri.....	112
6.3.2 Test on family income and MDM Satisfaction in Jalpaiguri.....	112
6.3.3 Analysis of parents in Rajganj.....	114
6.3.4 Test on family income and MDM Satisfaction in Rajganj.....	114
6.3.5 Analysis of MDM quantity and health Problems in Jalpaiguri.....	116
6.3.6 Test on MDM quantity and health Problems in Jalpaiguri.....	117
6.3.7 Analysis of MDM quantity and health Problems in Rajganj.....	118
6.3.8 Test on MDM quantity and health problems in Rajganj.....	119
6.3.9 Analysis of MDM satisfaction and daily attendance in Jalpaiguri.....	120
6.3.10 Test on beneficiary satisfaction (students) and daily attendance in Jalpaiguri.....	120
6.3.11 Analysis of MDM satisfaction and daily attendance in Rajganj.....	122
6.3.12 Test on beneficiary satisfaction (students) and daily attendance in Rajganj.....	122
6.3.13 Analysis of MDM quantity and health problems/illness in Jalpaiguri.....	124
6.3.14 Test on MDM quantity and health problems/ illness in Jalpaiguri.....	124
6.3.15 Analysis of MDM quantity and health problems/illness	

in Rajganj.....	125
6.3.16 Test on MDM quantity and health Problems/illness in Rajganj.....	126
6.3.17 Analysis of MDM quality and overall satisfaction in MDM in Jalpaiguri.....	127
6.3.18 Test on MDM quality and overall satisfaction of MDM in response to parents in Jalpaiguri.....	127
6.3.19 Cross tabulation analysis of MDM quality and overall satisfaction in MDM in Rajganj.....	129
6.3.20 Test on MDM quality and overall satisfaction of MDM in response to parents in Rajganj.....	129
6.4 Measuring the association or relationship between Urban (Jalpaiguri Municipality) and Rural (Rajganj).....	132
6.5 Comparison between Jalpaiguri municipality (Urban) and Rajganj block (rural).....	141
6.5.1 Results of hypothesis.....	143
6.6 Regression Analysis: Measuring Students' satisfaction in Mid Day Meal in Jalpaiguri.....	144
6.6.1 Analysis of Regression Result (Urban-Jalpaiguri).....	146
6.6.2 The Regression model.....	147
6.7 Regression Analysis: Measuring Students' satisfaction in Mid Day Meal in Rajganj.....	147
6.7.1 Analysis of Regression Results (Rural- Rajganj).....	148
6.7.2 The Regression Model.....	150
6.8 Regression Analysis: Hygiene of Mid Day Meal (Jalpaiguri).....	150
6.8.1 Analysis of Regression Results (urban-Jalpaiguri).....	151
6.8.2 Regression Model.....	152
6.9 Regression Analysis: Hygiene of Mid Day Meal (Rajganj).....	153
6.9.1 Analysis of Regression Results (rural –Rajganj ).....	154
6.9.2 Regression Model.....	155
Chapter 7: Impact of Civil Works in SSA.....	156-175
7.1 Introduction.....	156

7.2 Objectives.....	159
7.3 General Profile of Schools in the District.....	159
7.4 Provision of various types of civil works in Jalpaiguri Sadar & Rajganj.....	159
7.5 The extent to which the various civil work provisions (Input) provided in Primary schools in sample area.....	160
7.5.1. School with Single class Room .....	160
7.5.2 School with teachers availability.....	163
7.5.3 School with good condition in class rooms.....	164
7.5.4 Girls' toilet facilities.....	165
7.5.5 Provision of maintenance and development grant.....	166
7.5.6 Provision for Medical Chech Up.....	166
7.5.7 Provision for Boundary Wall .....	167
7.5.8 Provision for Play ground.....	167
7.5.9 Provision for Drinking water.....	168
7.5.10 Classification of Schools according to HM rooms...	169
7.5.11 Student teacher ratio.....	169
7.6 Response of Head teacher about the civil works for the improvement at Elementary Education.....	170
7.7 Response of Head teacher about the civil works for the improvement at Elementary Education in Rajganj.....	171
7.8 Relationship between gender and attendance in Schools at Rajganj.....	172
7.9 Relationship between gender and attendance in Schools at Jalpaiguri...	173
7.10 Relationship between attendances and condition of the class room in Jalpaiguri.....	174
7.11 Relationship between attendances and condition of the class room in Rajganj.....	175
<b>Chapter 8: Summary, Conclusion and suggestions.....</b>	<b>176-200</b>
8.1 Introduction.....	176
8.2 Major Findings of the Study Based on Jalpaiguri Sadar & Rajganj Block.....	177
8.3 The response of stakeholders (Students) regarding the impact of MDM.....	179

8.4 The response of stakeholders (Teachers) regarding the impact of MDM.....	187
8.5 Significant findings of the study towards the civil works.....	192
8.6 Suggestions and Recommendations .....	195
8.7 Suggestion for Future Studies.....	197
Bibliography.....	199-211
Index.....	212-214
Appendix.....	215-229

## List of Tables

Table No.	Name of the tables	Page No
1.1	Year wise no. of primary schools, upper primary schools. Enrolment and gross enrolment ratio	5
1.2	Out of school children (2005-06 and 2009-10)	6
1.3	Administrative units in the Jalpaiguri District	8
1.4	Area, Population and Density of Population in the district of Jalpaiguri, 2011	8
1.5	Sub-division wise scheduled caste, scheduled tribe and total population in Jalpaiguri 2011	9
1.6	Sub-division wise percentage wise total population of male (SC),female (SC),male (ST), female (ST)	9
1.7	Percentage of Literacy by sex in rural and urban areas in the district of Jalpaiguri, 2011	10
1.8	Coverage Children vs. Enrolment in West Bengal ( Primary) of AWP&B 2017-18)	11
1.9	Activities and time frame list by the RTE Act	14
1.10	District Wise Details About School building, Separate Room for Head teacher, Ramps Facility and Drinking water facilities in North Bengal	15
1.11	District Wise Details About School boundary wall, play ground, student class room ratio, toilet facility and pupil teacher ratio in North Bengal	15 -16
3.1	Management Structure at District Level	73
3.2	Comparison of Rural and Urban Population and literacy	74
4.1	Numbers of primary schools in West Bengal & Jalpaiguri	77
4.2	Details of Sample wards and Villages and Wards	79
4.3	Details about Sample schools surveyed	80
4.4	Details about primary schools, boys and girls in sample areas	81
4.5	Details about male and female parents	82
5.1	Different types of launch programme across the various states.	94
5.2	Brief summary of Mid Day Meal Programme in Jalpaiguri	98
5.3	No of primary schools in West Bengal & Jalpaiguri	99
5.4	Different types of monitoring agency	100
5.5	Number of Institutions- (Primary	102
5.6	Coverage of Children vs. Enrolment in North Bengal ( Primary)	102-103
5.7	Number of meal to be served and actual number of meal served during 2016-17	103

5.8	Coverage of schools (Primary) in studied area under MDM scheme	104
5.9	Details of Taste of the food (Jalpaiguri)	104
5.10	Details of Taste of the food (Rajganj)	105
5.11	Details of leftover of the Food	106
5.12	Details of hygiene and safe of the MDM	108
6.1	Response analysis of parents regarding family Income and MDM in Jalpaiguri	112
6.2	Chi square and correlation test on family income and MDM satisfaction in Jalpaiguri	113
6.3	Response analysis of parents regarding family Income and MDM Consumption in Rajganj	114
6.4	Chi square and correlation test on family income and MDM satisfaction in Rajganj	115
6.5	Response analysis of parents regarding MDM quantity and health problems in Jalpaiguri	116
6.6	Chi square and correlation test on MDM quantity and health problem in Jalpaiguri	117
6.7	Response analysis of parents regarding MDM quantity and health problems in Rajganj.	118
6.8	Chi square and correlation test on MDM quantity and health problem in Rajganj	119
6.9	Response analysis of students regarding beneficiary satisfaction and attendance in Jalpaiguri	120
6.10	Chi square and correlation test student's satisfaction in MDM and attendance in Jalpaiguri	121
6.11	Response analysis of students regarding beneficiary satisfaction and attendance in Rajganj	122
6.12	Chi square and correlation test student's satisfaction in MDM and attendance in Rajganj	123
6.13	Response analysis of students regarding MDM quantity and Health Problems/illness in Jalpaiguri	124
6.14	Chi square and correlation test on MDM quantity and health problems/illness in Jalpaiguri	125
6.15	Response analysis of students regarding MDM quantity and Health Problems/illness in Rajganj	125
6.16	Chi square and correlation test on MDM quantity and health problems/illness in Rajganj	126
6.17	Response analysis of parents regarding quality of MDM and overall satisfaction	127
6.18	Chi square and correlation test on MDM quality and overall satisfaction	128
6.19	Response analysis of parents regarding quality of MDM and overall satisfaction	129
6.20	Chi square and correlation test on MDM quality and overall satisfaction in Rajganj	130

6.21	Cross tabulation analysis between area (urban and rural) and increase in enrolment	131
6.22	Chi square test to access the association between area (urban and rural) and increase in enrolment	132
6.23	Cross tabulation analysis between area (urban and rural) and reduction in drop out	132
6.24	Chi square test to access the association between area (urban and rural) and reduction in drop out	133
6.25	Cross tabulation analysis between area (urban and rural) and increase in school attendance.	133
6.26	Chi square test to access the association between area (urban and rural) and increase in school attendance	134
6.27	Cross tabulation analysis between area (urban and rural) and increase in study behaviour	134
6.28	Chi square tests to access the association between area (urban and rural) and increase in study behaviour	135
6.29	Cross tabulation analysis between area (urban and rural) and sufficient quantity of MDM	135
6.30	Chi square tests to access the association between area (urban and rural) and sufficient quantity of MDM	136
6.31	Cross tabulation analysis between area (urban and rural) and increase in girl's enrolment	137
6.32	Chi square tests to access the association between area (urban and rural) and increase in girl's enrolment	137
6.33	Cross tabulation analysis between area (urban and rural) and quality of MDM served in the school	138
6.34	Chi square tests to access the association between area (urban and rural) and quality of MDM served in the school.	139
6.35	Cross tabulation analysis between area (urban and rural) and sufficiency of nutritional & educational effects of MDM served in the school	139
6.36	Chi square test to access the association between area (urban and rural) and sufficiency of nutritional and educational effects.	140
6.37	Details of 't'test for difference in enrolment, Drop out, attendance, improvement in study, quality and quantity of MDM served between Jalpaiguri Municipality (Urban) and Rajganj (rural)	140
6.38	Regression Model Summary measuring Students' satisfaction in Mid Day Meal in Jalpaiguri	142
6.39	ANOVA table measuring Students' satisfaction in Mid Day Meal in Jalpaiguri	144
6.40	Co-efficient table measuring Students' satisfaction in Mid Day Meal in Jalpaiguri	145
6.41	Regression Model Summary measuring Students' satisfaction in Mid Day Meal in Rajganj.	145
6.42	ANOVA table measuring Students' satisfaction in Mid Day Meal in Rajganj.	147
6.43	Co-efficient table measuring Students' satisfaction in Mid Day Meal in Jalpaiguri	148
6.44	Regression Model Summary measuring hygiene of Mid Day Meal in Jalpaiguri	148
6.45	ANOVA table measuring hygiene in Mid Day Meal in Jalpaiguri	150

6.46	Co-efficient table measuring hygiene in MDM in Jalpaiguri	150
6.47	Regression Model Summary measuring hygiene of Mid Day Meal in Rajganj	151
6.48	ANOVA table measuring hygiene in Mid Day Meal in Jalpaiguri	153
6.49	Co-efficient table measuring hygiene in MDM in Jalpaiguri	153
6.50	Co –efficient table measuring hygiene in MDM in Jalpaiguri	154
7.1	School related inputs	160
7.2	status of single teacher school	161
7.3	Status of schools with class rooms availability	163
7.4	Status Schools with good condition in class rooms	164
7.5	Total number of schools according to Medical check up facilities	166
7.6	Total number of schools according to boundary wall	167
7.7	Total number of schools according to play ground	167
7.8	Total number of schools according to drinking water facilities	168
7.9	Total number of schools according to HM Room	169
7.10	Student teacher ratio	169
7.11	status of civil works at Jalpaiguri	170
7.12	status of civil works at Rajganj	171
7.13	Chi square and correlation test between gender and attendance in Rajganj	172
7.14	Chi square and correlation test between gender and attendance in Rajganj	173
7.15	correlation test between attendance and condition of the class room in Jalpaiguri	174
7.16	correlation test between attendance and condition of the class room in Rajganj	175

## List of Figures

<b>Figure No.</b>	<b>Name of the Figures</b>	<b>Page No</b>
1.1	GER & NER in primary education and age specific enrolment ratio (6-10 years) (2013-14)	6
1.2	Dropout rate in Primary school from 2000-01 to 2008-09	7
3.1	Logo of Sarva Shiksha Abhiyan	67
3.2	Organisational Structure at National Level	71
4.1	Geographical Map of Jalpaiguri	78
5.1	Number of blocks covered by ICDS	93
5.2	Number of beneficiaries through MDM in India	94
5.3	Logo of Mid Day Meal Scheme	101
5.4	Quality of mid day meal	105
7.1	Government allocation for SSA from 2010 to 2018	157
7.2	Per student allocation form 2010 to 2017	157
7.3	Per student allocation state wise	158
7.4	Percentage of schools with single class rooms from 2004 to 2017	161
7.5	Percentage of schools according to class rooms availability	162
7.6	Percentages of schools on the basis of number of teachers	163
7.7	Percentage of schools required major repair	164
7.8	Status of Girls toilet in Jalpaiguri and Rajganj from 2004 to 2017	165
7.9	Status of provision of school maintenance grant and development grant	166
7.10	Total percentage of school according to medical check up	166
7.11	Total percentage of school according to boundary wall	167
7.12	Total percentage of schools according to playground	167
7.13	Status of drinking water facilities	168
7.14	Total number of schools according to head master/teacher room	169

# List of Abbreviations

AIE-Alternative and Innovative Education  
ANOVA- Analysis of Variance  
APPEP- Andhra Pradesh Primary Education Project  
ASER- Annual Status Education Report  
AWP &B-Annual Work Plan and Budget  
BDO- Block Development Officer  
BEP- Bihar Education Project  
BRC Block Resource Centre  
BRIC- Brazil, Russian Federation, India and China  
C.D Block -Community Development Block  
CRC- Cluster Resource Centre  
CSIR-Council for Scientific and Industrial Research  
CWSN- Children with Special Needs  
DIET- District Institutes of Education and Training  
DISE-District information System for education  
DM- District Magistrate  
DPEP- District Primary Education Project  
DPEP- District Primary Education project.  
ECC-Early Childhood Care  
EGS-Education Guarantee Scheme  
FAO-Food and Agriculture Organisation  
GER-Gross Enrolment Ratio  
GHI- Global Hunger Index  
GOI-Government of India  
ICDS-Integrated Child Development Services  
IMRB- Indian Market Research Bureau

ISE- Index of Social Equity

KGBV- Kasturba Gandhi Balika Vidyalaya

KMC-Kolkata Municipal Corporation

KPSC-Kolkata Primary School Council

LJP- Lok Jumbish Project

MC- Municipality Corporation

MDG- Millennium Development Goal

MDM-Mid day meal

MHRD-Ministry of Human Resource Development

M-Municipality

MS- Mahila Samakhya

MTA- Mother Teacher Association

NCERT-National Council of Education Research and Training

NCTE-National Council For Teacher Education

NER-Net Enrolment Ratio

NFHS-National Family Health Surveys

NGOs- Non Government Organisation.

NIEPA-National Institute Of Educational planning and Administration

NPEGEL- National Programme for Education of Girls at Elementary level

NPE-National policy on Education

NPNSPE- National Programme for Nutritional support to primary Education

NP-NSPE- National Programme of Nutritional Support to Primary Education

NUEPA- National University of Educational Planning & Administration

OBB- Operation Black Board

OBC-Other backward class

P.C-percent

PBSSM- Paschim Banga Sarva Siksha Mission

PMO-Prime Minister's Office

PROBE- Public Report on Basis Education

PTA- Parent Teacher Association

PTR- Pupil Teacher Ratio

RTE ACT-Right to Education Act.

SCERT- State Councils of Educational Research and Training

SCR- Student classroom ratio

SC-Scheduled caste

SDMC-School Development and Monitoring Committee

SDMC-School Development Management Committee

SEMCs- Social Education Management Committees

SIEMAT- State Institutes of Educational Management and Training

SKP- Shiksha Karmi Project

SSA- Sarva Shiksha Abhiyan

ST-Scheduled Tribe

TLM-Teaching Learning Material

TSC-Total sanitation campaign

UEE- Universal Elementary Education

UNESCO-United Nations Education, Scientific and Cultural Organisation

UNFPA-United Nation population Fund

UNICEF-United Nation Children's Fund

VEC- Village Education Committee.

WHO- World Health Organisation

WSDP-Whole School Development plan

DPSC-District Primary School Council

MIS- Management information System

NSMC-National Steering-cum-Monitoring Committee

PAB- Project Approval Board

JRM- Joint Review Mission

## List of Appendices

APPENDIX A: Questionnaire

APPENDIX B- Permission letter

APPENDIX C- List of publication

APPENDIX D- Photo Plates

# CHAPTER-I

## **Introduction to Sarva Shiksha Abhiyan**

# Chapter-I

## Introduction to Sarva Shiksha Abhiyan

### 1 Introduction

The role of Universal Elementary Education (UEE) to strengthen the social democracy through the provision of equal opportunities to all has been accepted since the inception of our Republic. The National Policy on Education (NPE), 1986/92, states:” In our national perception, education is essentially for all...Education has an acculturating role. It refines sensitiveness and perceptions that contribute to national cohesion, a scientific temper and independence of mind and spirit-thus furthering the goal of socialism, secularism and democracy enshrined in our constitution”. In addition to that, Act also makes compulsion that every child from the weaker section or disadvantage group must get elementary education. After the introduction of NPE, Government of India had initiated an extensive range programme for achieving the goal of UEE in the 1980s and 1990s. Operation Black Board (OBB), Shiksha Karmi Project (SKP), Andhra Pradesh Primary Education Project (APPEP), Bihar Education Project (BEP), Mahila Samakhya (MS), Lok Jumbish Project (LJP) and Teacher education programmes were introduced to support the mission of UEE.

Education is the best resource of the human being. ”. An educated person is an asset to a country and country’s development, culture & economy entirely depends on the quality education of its citizen. The Constitution (86 th Amendment) Act 2002, enacted in 2002 seeks to make a free and compulsory education a fundamentals right to all children in the age group 6-14. Article 45 states that state should strive to provide free and compulsory education for all children until they complete the age of 14. Since independence, the Central and State Govt. have put their great effort for expanding the provision of primary and non-formal education to set the goal of universalisation of elementary Education. So Govt. of India has made a provision of Rs.169 crores (44 crores for the central and 125 crores for the states) for educational development in the first five year Plan (1951-56). From the first five year plan, Govt. of India showed a deep interest in the total literacy campaign. After that, Govt. of India has taken some new plans in every five-year plan to reform in the education system in India. At the second five year plan, more significant emphasis was given in basic education, expansion of elementary education and diversifications of Secondary Education. The third five-year plan (1961-66) recommended for continuing the work started in the first and second-year plan. The main objectives in the third five- year plan were to expand and

intensify the education effort. Education became the focal point of planned development. Another important consideration of the third five -year plan was the provision of facilities for universal elementary education for the age group 6-11 on the basic line. In the fifth five -Year plan (1974-79), very high importance was given to the elementary education project. Earlier plans were formed to enrol the boys and girls in the elementary education system. However, the seventh plan (1986-91) attached the highest priority to realise universalisation of elementary education for children in the age group 6-14 by 1990. Eighth plan (1992-97) would also aim at universal primary education, and a special programme was launched for education for tribal children. The ninth five-year plan (1997-02) focused on providing primary education as a universal basic service and also making education is the fundamental right for children up to 14 years of age.

The Government of India is continuously putting significant effort and funds to universalise the education in India, so as a result in 1996-97 number of primary schools in India were 5,98,000 whereas the number was 2,10,000 in 1950-51.

The vision of the tenth five -year plan (2002-07) was to develop cognitive and critical skills in each child through SSA (SARVA SHIKSHA ABHIYAN). With this planning strategy, the State Government is determined to achieve universalisation of elementary education. So urgently we need a quality education program for the achievement of universalisation of elementary education. District Primary Education Project (DPEP) was launched in November 1994 to provide universalise and to provide quality primary education to all children through formal primary school or its equivalent through alternatives. DPEP were brought under one single project known as SSA (Sarva Shiksha Abhiyan) (Education for All) in 2001-02. It includes i) operation Blackboard.ii) teacher Education, iii) non-formal education (Education guarantee Schools, Alternative Schooling facilities, Balika Shikshan Shivir) .iv)Mahila Samakhya.v) National Programme for Nutritional support to primary Education (NPNSPE)

Over the years there has been a significant and more substantial expansion of elementary schools in the country. Access and enrolment at the primary stage in India have reached almost in universal levels, out of school children and gender gap has reduced significantly. The proportion of children belonging to SC and ST have increased in respect to enrolment and retention. Article 21-A and RTE Act came into effect from 1.04.2010, and it includes the words “ free and compulsory “. ‘ Free education’ means that every child, other than child who was already admitted by his or her parents to a school which is not supported by the

appropriate government, shall be liable to pay any kind of free or charges or expenses which may prevent him or her from pursuing and completing elementary education<sup>1</sup>. 'Compulsory education' casts an obligation on the appropriate Government and local authorities to provide and ensure admission, attendance and completion of elementary education in the age 6-14 age group.

## **1.1 The Present Context**

Currently, Sarva Shiksha Abhiyan (SSA) is realised as India's major programme for universalising elementary education. UEE includes universal access and retention, bridging of gender and social category gaps in education and enhancement of learning levels of children. SSA supports UEE by providing the opening of new schools, construction of schools and additional classrooms, toilet and drinking water facilities, sufficient teachers, periodic teacher training and academic resource support etc. The implementation of such provisions could make to achieve the agenda of universal education. The RTE Act provides an equitable and justifiable framework to all children in the age group 6-4 in respect of completion of elementary school. Most Significantly, it provides an education which is free from fear, stress, and anxiety.<sup>1</sup>

SSA has been operated since 2000-01. With the introduction of the RTE Act, the changes need to be incorporated into the SSA frame. The changes should not be confined with teachers or classrooms, but it should bring the vision and approach to elementary education. Social access to schooling is as important and critical issue. There are several categories of children, belonging to rural and urban areas. These categories include children belonging to General, SC, ST Muslim and OBC categories. Economic categories include the weaker sections and disadvantaged group.

With the project as mentioned above, the census 2011 showed improvements in literacy rate in India. As per the data published by the 2011 census, India has managed to achieve an effective literacy rate of 74.04 per cent in 2011. According to the report released by the latest census, there are almost 74 per cent literates that constitute the total population of India aged between seven and above. Sarva Shiksha Abhiyan (Education for All) was implemented in 2000 as a joint venture scheme between Central, State and Local Govt. and a time-bound

---

<sup>1</sup> <http://mhrd.gov.in/rte,Department> of School Education & Literacy

programme of universalization of elementary education. The SSA was initiated in the year November 2000 and aims to achieve the goal of universalization of elementary education of satisfactory quality by 2010 and other aims are to reduce overall dropout rates, increase average learning achievements rate, reduce gaps in enrolment, dropout & learning among gender and social group and establish capacity at the district, state, and national level to plan, manage and monitor program. The proposed instrument SSA is financed by European Commission, International Development Association, Local Govt. Body and British Development for International Development. The financial assistance from various agencies provided financial and technical assistance to establish SSA programme in India. The involvement of the World Bank is really appreciable in this context.

SSA is recognized as a supporting instrument to make possible universal access, enrolment and retention. This SSA programme has contributed significantly to the universalization of elementary education for all children in the age group 6-13 years. As per RTE Act 2009, State must ensure that availability of schools within a distance of 1 k.m in case of primary education. From All India School Education Survey, NCERT, it was found that there were 1,209,521 rural schools located in 5,86,986 villages. 51.55 percent of rural habitations were served by primary schools. SSA programme has a direct impact on the progress towards the goal of UEE. It includes the following

**a) Opening of new primary schools-**Till academic year 2013-14, a total of 207,995 of new primary schools were opened to serve the basic elementary education, and for this, 98 percent of rural habitations have the access to the primary schools within 1 k.m distance.

**b) Construction of additional rooms-**After the construction of 1,603,789 additional classrooms, student classroom ratio (SCR) has improved from 28 (2013-4) to 36 .(2006-07)

**c) Provision of residential schools-** It was found that many children in remote tribal or desert area do not avail the proper care and protection. For this, SSA provides proper care and protection through the establishment of residential schools. Up to 2013-14, 790 residential schools were opened with an enrolment capacity 86,750 students.

**d) Enrolment-** From the table 1.1 It was observed that enrolment in primary schools steadily increased from 2000-01 to 2011-12 and from 2012-13 onwards revealed a declining trend in enrolment. The year 2008-09 showed the highest enrolment in respect of boys and girls.

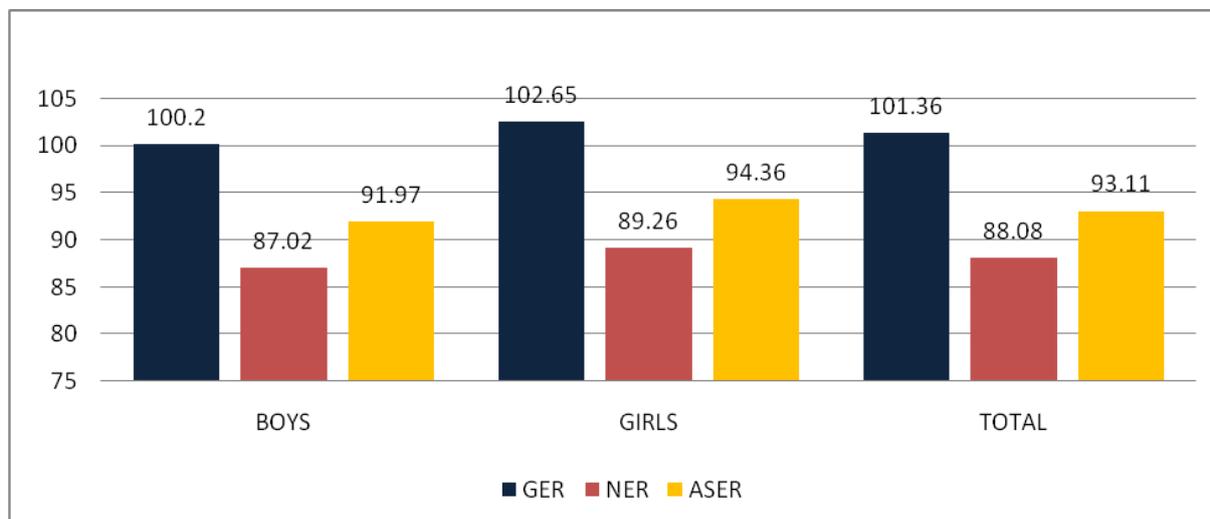
e) **Gross enrolment-** Gross enrolment in primary schools has increased significantly from 2000-01 to 2013-14. The GER increased from 95.7 percent (2000-01) to 116.0 percent (2010-11) and then decline to 101.4 percent in 2013-14. The overall increase in GER during the period from 2000-01 to 2013-14 was 5.7 percentage (from 95.7 percent to 101.4 percent). GER for boys decreased by 4.7 percent while GER for girls increased by 16.8 percent

**Table 1.1 Year wise no. of primary schools, upper primary schools. Enrolment and gross enrolment ratio**

Year	Number of Schools with Primary	Number of Schools with upper Primary	Number of Schools providing Elementary Education	Enrolment In Primary Education (in Millions)		Gross Enrolment Ratio (%)	
				Boys	Girls	Boys	Girls
2000-01	6,38,738	2,06,269	8,45,007	64.00	49.80	104.90	85.90
2001-02	2 664,041	2,19,626	8,83,667	63.60	50.30	105.30	86.90
2002-03	6,51,382	2,45,274	8,96,656	65.10	57.30	97.50	93.10
2003-04	7,12,239	2,62,286	9,74,525	68.40	59.90	100.60	95.60
2004-05	7,67,520	2,74,731	10,42,251	69.70	61.10	110.70	104.70
2005-06	7,72,568	2,88,493	10,61,061	70.50	61.60	112.80	105.80
2006-07	7,84,852	3,05,584	10,90,436	71.00	62.70	114.60	108.00
2007-08	8,05,667	4,45,108	12,50,775	71.10	64.40	115.30	112.60
2008-09	8,09,108	4,76,468	12,85,576	70.00	64.50	114.30	114.40
2009-10	8,09,974	4,93,838	13,03,812	70.80	64.80	115.50	115.40
2010-11	8,27,244	5,35,080	13,62,324	70.50	64.80	115.40	116.70
2011-12	8,42,481	5,69,697	14,12,178	70.8	66.30	106.80	109.30
2012-13	8,53,870	5,77,832	14,31,702	69.60	65.20	104.80	107.20
2013-14	8,58,916	5,89,796	14,48,712	68.60	63.80	100.20	102.70

Source: Statistics of School Education, 2007-08, MHRD, GoI; and Unified District Information System for Education (U-DISE), National, University of Educational Planning and Administration (NUEPA).

**Figure 1.1 GER & NER in primary education and age specific enrolment ratio (6-10 years) (2013-14) (%)**



Source: Statistics of School Education, 2007-08, MHRD, GoI; and Unified District Information System for Education (U-DISE), National, University of Educational Planning and Administration (NUEPA)

In respect, NER has increased to 88.08 percent in 2013-14, and it also observed that NER higher for girls (89.26 percent) in comparison to boys (87.02 percent). The estimation by ASER was also found higher for girls (94.36 percent) than boys (91.97 percent)

**f) Out of School Children-**As per Census 2001, the children in the age group 6-14 was out of the school estimated at 32 million which represented 28.2 percent of the total population in the age group 6-14. Indian Market Research Bureau (IMRB) conducted a survey and reported that the

**Table 1.2 Out of school children (2005-06 and 2009-10)**

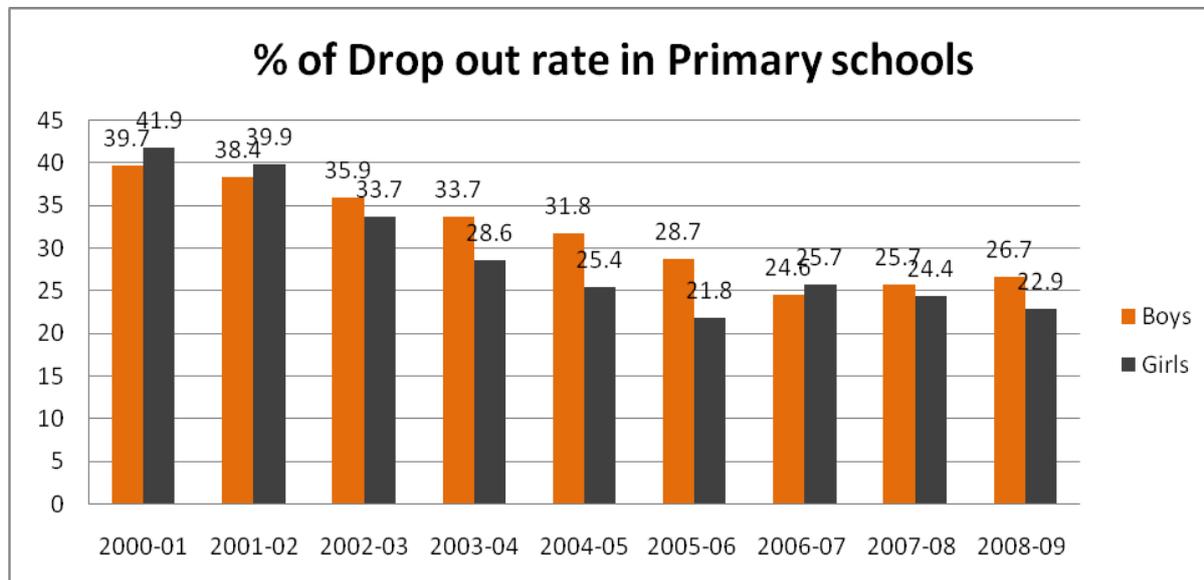
year	Number of out of Schools (in millions)	Percentage of out of school children to total population in age group 6-14
2005-06	13.45	6.94
2009-10	8.15	4.28

Source: Statistics of School Education, 2007-08, MHRD, GoI;

number of out of school estimated at 13.45 million in 2005-16 and it includes 4.34 percent from the urban area and 7.8 percent from the rural area. The survey conducted in 2009-10 and it was found that the number of out of schools decreased to 8.15 million (2009-10) from

13.45 million (2005-06). The survey indicated that out of school children has decreased from 6.94 percent (2005-06) to 4.28 percent (2009-10).

**Figure 1.2 Dropout rate in Primary school from 2000-01 to 2008-09**



Source: Statistics of School Education, 2007-08, MHRD, GoI; Educational Statistics at a Glance, 2011, MHRD, GoI

The dropout rate for girls declined by 19 percent whereas boys' drop out rate decreased by 13 percent during 2000-01 to 2009-10. The study found that the majority of the primary schools do not have the attached upper primary schools. As a result, most of the children do not get the opportunity to enrol themselves. Due to the opening of new primary schools, children able to enrol in the schools within a reasonable walking distance from the habitations of residence of children.

## 1.2 Scope of the study

The scope of the present study is to examine the effectiveness of Sarva Shiksha Abhiyan in respect to Mid-day meal and Civil works in Jalpaiguri Sadar and Rajganj Block. The effectiveness of MDM was felt positively across the area, and it steadily increases from the inception of the scheme. There is wide variation in socio-economic status between Jalpaiguri Sadar and Rajganj block in the Jalpaiguri district where the investigator had conducted a survey in respect of mid-day meal. While Jalpaiguri Sadar is an urban town in nature, the other sample area Rajganj block is rural nature

**Table 1.3 Administrative units in the Jalpaiguri District**

Sub-Division	Police Station	C.D.Block / M / M.C.	Panchayat			Mouzas (2001)	Inhabited Villages (2011)	House-holds (2011)		
			Samity	Gram	Gram Sansad					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
Sadar Sub-Div. (total)	6	4/2	4	58	830	247	231	410305		
	Rajganj Bhaktinagar(P)	Rajganj	1	12	173	29	26	82038		
	Jalpaiguri	Jalpaiguri	1	14	199	29	28	73981		
		Jalpaiguri(M)		2	26	372	58	52	156019	
Sub-Division	Police Station	Town								
		Municipal Corporation		Municipality		Notified Area		Census Town (2011)	Out-growth (2011)	Total
		No.	Ward	No.	Ward	No.	Ward			
(1)	(2)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Sadar Sub-Div.	6	1(P)	14	2	41	-	-	9	-	11+1(P)
	Rajganj Bhaktinagar(P)	-	-	-	-	-	-	3	-	3
	Jalpaiguri	-	-	-	-	-	-	1	-	1
		-	-	1	26	-	-	-	-	1

14 wards of Siliguri M.C. belong to Jalpaiguri district ,(p)=part  
Source-Census Of India 2001 and 2011, District Panchayat & Rural Devl. Office, Jalpaiguri

As per 2011 census, the Rajganj block consists 14 grams and 199 Gram Sansad while in Jalpaiguri Municipality includes 25 wards. As regards religion composition, Rajganj block had a large concentration of Muslim (70%) while the schedule tribe and schedule caste contributes major portion in the population of Jalpaiguri.

**Table 1.4 Area, Population and Density of Population in the district of Jalpaiguri, 2011**

Sub-Division / C.D.Block / M / M.C.	Area ( Sq.Km.) (2001)	Population (Number)	Density of Population ( per Sq. Km.)	P.C.of population to district population
(1)	(2)	(3)	(4)	(5)
<b>Sadar Sub-Div.</b>	<b>2245.47</b>	<b>1811885</b>	<b>807</b>	<b>46.78</b>
Rajganj	614.82	373776	608	9.65
Jalpaiguri	500.65	323445	646	8.35
Jalpaiguri(M)	12.50	107341	8587	2.77

Source-Census Of India 2001 and 2011, District Panchayat & Rural Devl. Office, Jalpaiguri

**Table 1.5 Sub-division wise scheduled caste, scheduled tribe and total population in Jalpaiguri 2011**

Sub-Division / C.D.Block / M / M.C.	Scheduled Caste			Scheduled Tribe			Total Population		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Sadar Sub-Div.</b>	<b>455186</b>	<b>428474</b>	<b>883660</b>	<b>64607</b>	<b>65469</b>	<b>1E+05</b>	<b>928650</b>	<b>883235</b>	<b>1811885</b>
Rajganj	95442	89804	185246	7848	7538	15386	193185	180591	373776
Jalpaiguri	100939	95653	196592	9722	9870	19592	166036	157409	323445
Jalpaiguri(M)	12016	11745	23761	523	452	975	53708	53633	107341

Source-Census Of India 2001 and 2011, District Panchayat & Rural Devl. Office, Jalpaiguri

**Table 1.6 Sub-division wise percentage wise total population of male (SC),female (SC),male (ST), female (ST)**

Sub-Division / C.D.Block / M / M.C.	% of Total Population			% of Total Population		
	Male (SC)	Female (SC)	Total (SC)	Male (ST)	Female (ST)	Total (ST)
(1)						
<b>Sadar Sub-Div.</b>	49.40	48.51	48.77	6.96	3.61	7.18
Rajganj	49.40	49.73	49.56	4.06	2.02	4.12
Jalpaiguri	60.79	60.77	60.78	5.86	3.05	6.06
Jalpaiguri(M)	22.37	21.90	22.14	0.97	0.42	0.91

Source-Census Of India 2001 and 2011, District Panchayat & Rural Devl. Office, Jalpaiguri

From the above table, it was found that schedule caste male and female had a high concentration in Rajganj and Jalpaiguri, but Jalpaiguri Municipality had a lower portion of scheduled caste population. On the other hand, ST population in Rajganj 7.18% whereas a very negligible share of ST population in Jalpaiguri Municipality.

**Table 1.7 Percentage of Literacy by sex in rural and urban areas in the district of Jalpaiguri, 2011**

Sub-Division / C.D.Block / M / M.C.	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>Sadar Sub-Division</b>	<b>79.1</b>	<b>64.1</b>	<b>71.8</b>	<b>86.0</b>	<b>76.8</b>	<b>81.5</b>	<b>81.7</b>	<b>69.0</b>	<b>75.5</b>
Rajganj	79.2	65.4	72.6	77.7	64.9	71.5	78.5	65.1	72.0
Jalpaiguri	79.6	65.0	72.5	84.2	73.6	79.0	80.5	66.7	73.1
Jalpaiguri(M)	-	-	-	93.1	88.1	90.6	93.1	88.1	90.6

Source-Census Of India 2001 and 2011, District Panchayat & Rural Devl. Office, Jalpaiguri

From the above table 1.7, it reveals that there is a gap between rural (Rajganj) and Urban (Jalpaiguri) in literacy achievement rate. While the Jalpaiguri Municipality had a literacy rate of 90.64 %, 71.52% share of literacy to the total population in Rajganj block. Currently, mid-day meal covers 107 schools in Jalpaiguri municipality and 317 schools in Rajganj, and it results in 16068, and 47,343 students from Jalpaiguri Sadar and Rajganj are benefitted from the MDM. The Central Govt. Introduced MDM to improve the enrolment, attendance and retention and also nutritional level among children especially from the disadvantaged section of the community. So, the present study aims to analyse the various aspects of the MDM viz increase in enrolment, attendance, retention, hygiene, and satisfaction of students. The study also worked upon the civil or infrastructure facilities in the schools. Apart from them, three significant stakeholders viz teachers, students, and parents have been considered to understand the effectiveness of MDM and the extent of infrastructure facilities in the schools. The objective of the present study is to cover the main issues with respect to MDM and the availability of other facilities for the effective implementation of MDM.

The participation of MDM ensures involvement in elementary education. MDM has resulted preventing classroom hunger, promoting school participation, bridging social equity .but the table 1.10, revealed that difference enrolment and beneficiary of the MDM was 14% in Hooghly district, followed by Jalpaiguri (13 percent) and Maldah (12 percent). The meal pattern of the MDM should be such that it provides a nutritional and balanced diet to the students Non-participation in MDM affects active learning capacity. Malnutrition has an impact on UEE in the form of absent in the school which turns into the drop out of school. As

most of the children belong to the poor economic family, MDM programme acts as a motivator for the parents

with the belief that children will get sufficient food. As 13 percent of the school children not availing the benefits of MDM as per AWP & B 2017-18 (Annual Work Plan and Budget) is a matter of concern in Jalpaiguri district.

**Table 1.8 Coverage Children vs. Enrolment in West Bengal ( Primary)**

Sl. No.	Districts	Enrolment as on 30.9.2016	Average number of children availing MDM	Diff	% Diff
1	2	3	4	5=4-3	6=5/3*100
1	Alipurduar	114651	114069	-582	-1%
2	Bankura	264177	248159	-16018	-6%
3	Birbhum	381106	356997	-24109	-6%
4	Burdwan	597055	562498	-34557	-6%
5	Cooch Behar	235784	232585	-3199	-1%
6	D/Dinajpur	141343	135403	-5940	-4%
7	U/Dinajpur	391477	372005	-19472	-5%
8	GTA	57300	56620	-680	-1%
9	Hooghly	288864	249775	-39089	-14%
10	Howrah	318050	314126	-3924	-1%
11	Jalpaiguri	180361	157800	-22561	-13%
12	Kolkata	146523	136477	-10046	-7%
13	Malda	493768	435279	-58489	-12%
14	Murshidabad	667840	622565	-45275	-7%
15	E/Medinipur	429622	424830	-4792	-1%
16	W/Medinipur	559997	556091	-3906	-1%
17	Nadia	407918	392196	-15722	-4%
18	N/24 Pgs.	545548	532979	-12569	-2%
19	S/24 Pgs.	825574	811862	-13712	-2%
20	Purulia	312803	295679	-17124	-5%
21	Siliguri	78628	78183	-445	-1%
	<b>TOTAL</b>	<b>7438389</b>	<b>7086178</b>	<b>-352211</b>	<b>-5%</b>

(Source data: Table AT-4 & 5 of AWP&B 2017-18)

### **1.3 Importance of the study**

Basic education plays a vital role in the educational system in India. From 1950 onwards there has been an urgent demand for the introduction of universal, free and compulsory primary education. To fulfil the demand, the SSA was launched in 2000-01 in Jalpaiguri district. To respond positively to this demand SSA was a significant move toward the implementation of policies undertaken by the Govt. of India. My preliminary investigations of SSA in this district have revealed that the performances, as well as the success rate of SSA, have not been satisfactory. My understanding of this situation suggests that a lack of proper communication between policymakers and those who implement these policies has somehow hindered the overall aims of the programme. Besides the failure of introducing updated course curriculum and teaching methodology etc. has limited the effectiveness of the programme making both teachers and students apathetic to the whole more. The present study was taken for the following reasons;

- (a) The paper will try to make some possible suggestions to attract more children to school-centric in Jalpaiguri.
- (b) The present work aims at the all round development of the child which can be achieved through a proper exercise and implementation of the basic education system. The present study will do needful analyse which can be used by the Government departments and local authority as helpful materials.
- (c) The study will try to reform the basic primary education system on modern lines instead of a traditional system which now exists in the present basic education system.
- (d) To study the impact of MDM scheme on enrolment, attendance, and retention.
- (e) To examine the hygiene factors of MDM.
- (f) To study the various elements for the effective implementation of MDM.
- (g) To study the impact of civil works in UEE.

The purpose of the present study besides analysing what has been said above is also to offer possible changes in the existing SSA programme in Jalpaiguri regarding to the modernisation of teaching-learning methodology. My research paper could also suggest ways to establish a balance between policymaking and policy implementations for effective universalisation of education system in Jalpaiguri. The findings of my study can be used by the Department of school education or NIC (National Information Centre) and other policymakers for framing new provision of MDM.

The above study likely to analyse the critical factors of MDM in Jalpaiguri Sadar and Rajgung Block and also a comparative analysis of infrastructure facilities in those areas. The present research work will show the essential elements that govern in promoting MDM and as well as the condition of infrastructure facilities in the schools.

#### **1.4 Statement of the problem**

The Role of Sarva Shiksha Abhiyan in Achieving Education for All (AEE): A Study of Rural & Urban Areas of Jalpaiguri District.

#### **1.5 Research Area**

For the research project, we have set our research area in Jalpaiguri Sadar & Rajgung block in Jalpaiguri district. The area has chosen to make a comparative study between two adjacent regions and make a viable analysis on it, in respect of universalisation of elementary education through SSA. Among the 13 blocks, I have taken two blocks for research purpose

1. Jalpaiguri Municipality (Urban)
2. Rajganj Block (Rural)

#### **1.6 Research Problems**

The RTE provides an Act that mandates for every child in the age of six to fourteen age group shall have a right to free and compulsory education in a neighborhood school. The act also provides that if a school does not exist in the area, the appropriate Government should take

proper initiatives to establish a school within a period of three years. The following timeframes, mandated by the RTE Act, become immediately applicable to SSA.

**Table 1.9 Activities and time frame list by the RTE Act**

<b>Activity</b>	<b>Time Frame</b>	
Establishment of neighbourhood schools	3 years (by 31st March,2013)	
Provision of school infrastructure		
All weather school building		
One class room-one teacher		
Office cum-store-cum-Head teacher room		
Toilet and drinking water facilities		
Barrier free access		
Playground		
Fencing/boundary wall		3 years (by 31st March,2013)
Provision of teachers as per prescribed PTR		3 years (by 31st March,2013)
Training of untrained teachers	5 years (by 31st March,2013)	
All quality interventions and other provisions	with immediate effect	

Source: Sarva Shiksha Abhiyan, MHRD

School access has been converged covering not merely physical factors but also social issues including caste, class and special needs. While determining the local requirement for such access of children to neighborhood schools, the availability of classrooms, drinking water facility, the playground facility, and other infrastructural facilities should be much focused.

The district has many problems such as unemployment due to lack of industries, poor communication, poverty, parents' indifference or lack of interest in SSA. The problem lies with the limited accountability of schools owing to insufficient local supervision and control. Some basic information for infrastructure is given below.

**Table 1.10 District Wise Details About School building, Separate Room for Head teacher, Ramps Facility and Drinking water facilities in North Bengal**

District Name	Govt. & Govt Aided	Schools having Building	% of schools having building	Schools having Head Master Rooms	% of schools having Head master / Head Teacher Room	Schools Having Ramps	% of schools having Ramps	Schools having Drinking Water Facilities	% of schools having Drinking water Facilities
Dakshin Dinajpur	1719	1719	100.00	238	13.85	848	49.33	1718	99.94
Darjeeling	1319	1312	99.47	77	5.84	50	3.79	782	59.29
Jalpaiguri	3157	3157	100.00	400	12.67	1953	61.86	3079	97.53
Coochbehar	2519	2519	100.00	212	8.42	1577	62.60	2519	100.00
Maldah	2571	2569	99.92	668	25.98	1722	66.98	2546	99.03
Murshidabad	4896	4689	95.77	872	17.81	2977	60.80	4841	98.88
Siliguri	765	764	99.87	125	16.34	381	49.80	751	98.17
Uttar Dinajpur	2460	2460	100.00	250	10.16	943	38.33	2458	99.92

Source: Paschim Banga Sarva Siksha Mission Annual Report 2015-16.

**Table 1.11 District Wise Details About School boundary wall, play ground, student class room ratio, toilet facility and pupil teacher ratio in North Bengal**

District Name	Schools Having Boundary Wall	% of schools having Boundary Wall	Schools Having Play Ground	% of schools having Playground	Student Class room Ratio	Schools Having Girls Toilet	% of schools having Girls Toilet	Schools Having Boys Toilet	% of schools having Boys Toilet	Pupil teacher Ratio
Dakshin Dinajpur	700	40.72	570	33.16	32.63	1715	99.77	1717	99.88	30.5
Darjeeling	177	13.42	616	46.70	16.33	700	53.07	623	47.23	15.3
Jalpaiguri	442	14.00	1803	57.11	38.75	2873	91.00	2128	67.41	31.6
Coochbehar	572	22.71	1668	66.22	36.51	2011	79.83	2203	87.46	34.5
Maldah	742	28.86	762	29.64	46.48	2173	84.52	1558	60.60	46.3
Murshidabad	1260	25.74	911	18.61	44.08	2692	54.98	4167	85.11	39.3

**Table 1.11 District Wise Details About School boundary wall, play ground, student class room ratio, toilet facility and pupil teacher ratio in North Bengal (continued)**

Siliguri	250	32.68	437	57.12	40.33	737	96.34	447	58.43	35.5
Uttar Dinajpur	488	19.84	929	37.76	46.22	1427	58.01	1984	80.65	44

Source: Paschim Banga Sarva Siksha Mission Annual Report 2015-16.

The above table 1.10 shows that there are in total 3157 primary schools in Jalpaiguri district, out of which 12.67 per cent of schools having the facility of a separate room for the head teacher. To ensure quality education in favour of children with Special needs (CWSN) across the district, the Govt has adopted a policy whereby the expertise of the state's leading agencies is being made available to all. Local NGOs have also been involved in to participate in the programme and help in promoting the services being rendered to the CWSN. Inclusive education for CWSN has been promoted through the creation of a barrier-free environment including barrier-free toilets and provision of appropriate teaching-learning material. Out of 3157 total schools, 61.86 per cent of schools were installed with ramps facilities. Every school going has the right to get access to safe drinking water in their place of learning. Table 1.10 shows that 97.53 per cent of schools have the facilities for drinking water. Table 1.11 shows that majority of the schools do not have the facility of boundary wall and it is seen that only 14 percent of the schools had a boundary wall. In respect of playground facility, 57.11 per cent of the schools had the playground and open space .on an average, and a child spends six hours a day in a school. Naturally, it requires providing minimum toilet facilities to the student. Therefore, the matter of sanitation and hygiene in schools needs special importance by proving toilet facilities. The above table 1.13 shows that toilet facilities are available in 91.00 for girls and 67.41 per cent for boys. Toilet and water facilities are to some extent good in compare to Darjeeling, Coochbehar, Maldah and Uttar Dinajpur.

The researcher identified the following problems lies with SSA in the research area:

### **1.6.1 Infrastructure Problems**

The school building has to ensure easy access to all children and teachers. The school building does not mean only physical structure; and it should be built with special design features such as

ramps, handrails, modified toilets etc. Separate toilet for girls, classrooms with natural light, ventilation, proper seating capacity are the indicators of quality educational transactions. The indoor and outdoor space of the school provides opportunities for learning. Creative use of spaces like inside wall of the classroom, verandas through drawings and art can serve the purpose of vision of SSA. Development of such school infrastructures like school building along with its indoor and outdoor spaces contributes to the goal of universal access, retention, equity and quality in education. WSDP is an educational plan that guides the infrastructure plan and its effective usage in the learning processes. WSDP are i) infrastructure plan to follow the education plan ii) Child-centered planning with overall development of child(Physical, social, emotional) addressed iii) Responsive towards needs of all children and diversity they bring in a school, iv) Entire school space (indoor and outdoor) at learning continuum for a child and the teacher-this is to be recognized by all stakeholders while planning v) Development of entire school space as a resource for fun and learning activities, vi) A safe and secure environment for all children. Vii) Clean and hygienic environment for all children. Optimum resource utilisation and cost-effectiveness.

### **1.6.2 Components of infrastructure considerations for design, planning and implementations**

#### **i) Composite Building:**

Every new school is to be constructed under SSA should have a composite building, includes all features as per RTE Act, as the sufficient number of rooms, toilet and drinking water facilities,MDM kitchen shed, boundary wall, playground, sports equipment, TLM and library.

#### **ii) Barrier -free access:**

It implies that the physical design of the school building should be such that all children including children with disabilities should be able to move freely and also able to use other facilities like play ground, drinking water, and toilet facilities.

#### **iii) Maximising pedagogic:**

Potential: Indoor and outdoor space of the schools can be used as a learning resource it could be complement the teaching process and supplement textbook information. The different shapes of the building (like dimension, textures, shapes, angles) can be used to make understand some basic concepts of language, science, mathematics and environment.

#### **iv) Drinking water and sanitation facilities:**

National Rural Drinking water Mission to provide drinking water facilities and also TSC also supports sanitation facilities in rural schools. Rural schools which do not have the facilities of drinking water and sanitation facilities can be covered under this scheme.

#### **v) Playground facilities**

Playground or outdoor spaces are also equally important to universalisation access to elementary education. It may include a school garden, tree grove, places of mutual interaction, sports etc.

Most of the schools have the adequate infrastructure like the school building, toilet facility, boundary wall, drinking water facility etc. but not as per specification set by RTE Act which affects the attendance of the students and also teaching quality.

### **1.7 Mid –day meal Programme**

With a view to enhancing enrolment, encouraging poor children, help them concentrate on classroom activities and simultaneously improving nutritional level among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched on 15th August; 1995. Monitoring and coordination are resulting proper implementation of the programme. In 2001 the Supreme Court of India has made mandatory to all State Governments to provide Mid- day Meal in the schools. India is also a signatory member of “ Millennium Development Goals” which made on 8th September 2000 in UN Millennium Summit. As per MDG, India has to achieve the goal of UEE by 2015. All schools in Jalpaiguri are covered under the MDM scheme. The rural population of Jalpaiguri as per 2011 census 73 percent and scheduled caste (37 per cent) and scheduled tribes(19 per cent) had contributed a significant share in the overall population. While MDM scheme was found to be remarkable but the programme faces some problems. The various reasons for problems are the absence of children, lack or poor performances of the cook, poor quality of foods, absence of proper kitchen and kitchen shed, deficiency of kitchen devices.

The Child of today will become the future of the nation. As per Article 6 of the United Nations Convention on the Right of Child “Every child has the right to life”. It implies that every child shall have the right to get healthy and nutritious foods with some basic facilities like clean water, medical facilities, and education. Poor nutrition affects brain development,

intelligence also children will suffer from an overall health problem. Poor nutrition in the first 1,000 days of a child's life can also lead to stunted growth, which is associated with impaired cognitive ability and reduced school and work performance( UNICEF)<sup>2</sup>. As per World Bank data (2013) disclosed that World's highest malnutrition prevails in India and India's Global Hunger Index (2017) ranked 97 out of 118 nations. At 31.4 score obtained by India in GHI is categorised as serious category nation. Elimination of poverty, hunger, and malnutrition requires sustained political commitment at the highest level (P.sharma,2016)Mid-day meal scheme is a social welfare instrument for economically backward classes. Intellectual performance is a major yardstick of academic excellence which is dependent on nutritional (Bhargava,2001). Education and health are closely related for this education and health are viewed as in the light of capability approach, and the conception of poverty has been viewed as “ capability deprivation” by providing an inferior quality of foods to the poor (Laxmi Narayanan,2010). Apart from nutritional effect, sitting together in a launch programme teaches the value of togetherness without discrimination of caste and. The Scheme has much contributed to the children's well being and future and with adequate resource and quality safeguards midday meal can play a significant role in boosting attendance, eliminating hunger and fostering social equity (Jean Dreze,2003).MDM also found to be very successful in raising enrolment and attendance among children mainly from the economically challenged category with less educated parents (Stephanie Bonds,2012). No doubt MDM plays a more significant role to achieve the goal of UEE. But quite often insects and unhygienic meal put the scheme unwanted by the parents and students. The most distrusting fact is that the quantity of the food is not sufficient and it is much lower than Govt. Guidelines. Enrolment in primary students has increased substantially, but upper primary level's enrolment has not responded much (ISI,2013). Repetition of the dull menu and lack of taste do not affect much in attendance and enrolment. Since its inception, MDM has played a very significant role in the universalisation of elementary education. And so despite all flaws, the way to go on MDM is forward and not backward. So, it is highly needed to evaluate the policy. The MDM killed 27 children in Chapra in 2013 and also median reported about MDM irregularities and complaints. On this occasion, the present research paper has been taken with the following objectives

- To ascertain the relationship between MDM and family income

---

<sup>2</sup> Malnutrition-UNICEF data, <https://data.unicef.org/topic/nutrition/malnutrition/>

- To find out impact of MDM on attendance, enrolment and drop out
- To study the beneficiary satisfaction of MDM in regard to quantity, quality, health issues

## **1.8 Limitations of the study**

The study was restricted to only Govt and Govt aided schools in Jalpaiguri Municipality and Rajganj block.

1. The Sample size is limited to Rajganj block and area covered under the Jalpaiguri Sadar in Jalpaiguri district. The sample size may not adequately represent the true and fair picture of the study.
2. Random and judgment sampling technique is limited due to time and financial constraints
3. The facts and figures which will be used from journal, newspapers, articles, reports, etc may not give the true result of the study.
4. When the investigator goes for a personal interview with the authority, guardians, students and other officials, some biases may exist which may affect the result of the study .
5. All the materials which are required for the study may not be collected or available.
6. The head teachers and teachers were feeling discomfort to response all the queries as per questionnaire. After considerable time, they responded when it was given assurance that data will be used only for academic and research purposes and their responses will not be disclosed further.
7. The parents have felt hesitant to reveal their income. After counselling, they also responded positively.
8. The student studying in the primary section were so young and immature,they were feeling discomfort to share their views, experience about the MDM.
9. Demographic variables like age, gender, caste, experience, education of teachers and parents have not been considered in the study.

In spite of the above limitations, the study throws some light on the comparative analysis of MDM implementation effect and infrastructure facilities in Jalpaiguri Municipality and Rajganj block. But the investigator will put maximum effort to minimise the limitations and also to present the true and fair picture of the study.

## **1.9 Chapterisation**

Since 1950 promotion of universal elementary education has been initiated by the Government of India. SSA is the partnership initiatives with central, states, local Govt. community to provide elementary education to all children in the age group 6-14 year by 2010. So, need-based planning and implementation of the programme of identification of children requiring education, enrolment, attendance and completion of classes are undertaken every year by Paschim Banga Sarva Siksha Mission (PBSSM) under the overall guidance of the School Education Department, Government of West Bengal. Keeping in view the research objectives, the entire research work has been characterised as follows.

### **Chapter-I**

The 1st Chapter is introductory. The introduction has been covered with various subtopics. Subtopics areas the present context of the study, the scope of the study, the importance of the study, statement of the problem, research area, research problems. It also includes the preliminary idea about the midday meal and limitation of the study

### **Chapter-II**

The second chapter deals with the review of related studies which was already carried out by different academicians, educationalists, researchers, and policymakers in India, particularly in West Bengal and it helps to compare and contrast in the historical context of the research and also provides the rationale of the framework of the study.

### **Chapter-III**

The third chapter deals with the theoretical orientation of the study. In this chapter, the researcher will give a brief study of the historical background of education by enumerating the stages in education, i.e. Pre British period, the duration during British periods and the post-independence period. The Researcher also gives a brief discussion about the different programmes of elementary education and concept of Sarva Siksha Abhiyan and its functions, strategies, basic components, structures to universalise of elementary education.

#### **Chapter-IV**

The fourth chapter deals with the research methodology used for the study. The chapter includes the profile of Jalpaiguri district, criteria for selection sampling unit (Jalpaiguri Municipality and Rajganj block), sampling techniques, pilot study, the collection of data, data analysis techniques, hypotheses formulation and limitations of the study

#### **Chapter-V**

The fifth chapter titled “Mid-day meal Jalpaiguri Municipality and Rajganj block” covers aspects such as historical perspective of MDM, introduction of MDM in India and Jalpaiguri district, National Food Security Act, 2013, objectives of MDM, administrative agencies of MDM at national, district and village level, etc

#### **Chapter-VI**

The 6th chapter is entirely based on “ data analysis” with vies of students, parents, teachers, which was collected through planned questionnaires, observation and personal interview. Various descriptive techniques like graphs, charts have been used for the description of the study. This chapter includes the analysis and interpretation of data on Did day meal in Jalpaiguri Municipality and Rajganj Block.

#### **Chapter-VII**

The sixth chapter deals with the impact of Infrastructure facility in Sarva Shiksha Abhiyan in respect to different variables like schools with boundary wall, with black blackboard drinking water facility.etc. The chapter also evaluates the role of civil works in SSA and also to emphasise the need for better infrastructure that would provide quality education in a school-centric environment.

## **Chapter-VIII**

The eighth chapter deals with the outcome of the present research work will be discussed along with the suggestions. It includes primary findings of the research work and concluding interferences which will be used for future studies. So, there is a need for the overall good quality content. So that it enhances the quality of children-the future of India.

## Chapter -2

# **Review of Related Literature**

# Chapter -2

## Review of Related Literature

### **2.1 Introduction**

A literature review is a written scholarly work by researchers and scholars, and it includes contrasting perspectives, theoretical approaches, methodologies, findings, and summary. In this chapter, an effort has been made to review past related studies to identify the research gaps in the current scenario. The author has adopted a systematic literature method to explain the relationship between each of the works. So that required knowledge is intended to establish a framework for the present study. It provides the evidence and discussion that are relevant to the topic and also put information that reflects the research objectives. The review of work is vital for the framework of the present study. The literature review provides the affected area of study and also critically analyses the data and information by identifying research gaps in current knowledge. It helps to identify in-depth grasp of the present work by providing the valuable guiding principle for defining statement and significance of problems. It provides a useful guide to develop a new argument or idea which is the foundation of the present work and to understand the real nature of the problems and research gaps.

The present study deals with the role of Sarva Shiksha Abhiyan in achieving education for all concerning some parameters, and the investigator has studied relevant journals, conference proceedings, government pamphlets, thesis and dissertations of Sarva Shiksha Abhiyan.

### **2.2 Importance of review of related literature**

A literature review is an integral part of the research work and sets the primary platform to design the current research. S.P. Sukhia and P.V. Mehrotra (1966) stated that “both availability and utilisation of adequate sources of related information are essential for proper research activity. Survey of related literature does form one of the early chapters of a thesis, but also useful purpose” Thus review of literature includes systematic identification and analysing of related information to the research area. Being familiar with earlier research also helps to

interpret and find results. It also helps the investigator to frame the research questions and research hypotheses that provide future directions for the investigator.

Review of literature provides recent work and strategies that make the productive investigation and also provides following guidelines.

**1. To focus on research problems-**

While reviewing the literature helps to learn different aspects of a research area that have been examined by the others. After the critical examination of such aspects, the investigator has identified the focus area of research and research gaps which are essential to a present study.

**2. To improve research methodology-**

A literature review tells about the various methodology which have been used by others and what problems they have faced after adopting the particular methodology. The Review helps the investigator to select a better methodology that capable of providing research questions.

**3. To avoid duplication of well -established findings-**

A proper review avoids duplication of work which has established with relevant data & facts.

**4. To contextualise research findings-**

Research findings must fit into research work after obtaining research questions. Literature review enables to compare findings with others, and it is essential to put the findings in the context of existing perception of research work.

**5. To know the previous findings and conclusions:**

The final suggestions and conclusions of the previous research are the guiding resources for the present work.

### **2.3 Source of literature:**

There are two types of sources i) Primary ii) Secondary. The present study with the role of Sarva Shiksha Abhiyan, the investigator, has reviewed the literature review, but no research work has found which deals with the present research work. The review has taken in two ways.

Primary Source-primary data can be collected from(i) the field through the survey,(ii)sample survey. (iii) DISE (iv) By making the questionnaire

Secondary Source-Secondary data can be collected through (i) Census (ii) Research journals (iii) Articles, newspapers (iv) PhD thesis (v)the published or unpublished reports by the Govt.or NGO or any other private organisation.

### **2.4 Review of Literature**

In this division, the researcher has studied many articles, thesis, reports etc. related to research work, but it was decided to select those studies which are directly or indirectly related to the studies

Universalisation of elementary education has been the most important goal of education planning in independent India. To universalise the elementary education SARVA SHIKSHA ABHIYAN programme has launched. Though the very high effort has been taken to universalise the education, substantial challenges remain in India till now. Such as how to attract children into schools, reduce dropout rates, improve retention rates, etc. Education is supposed to be authorisation to a better life. Former Prime Minister Mr Rajiv Gandhi started the literacy campaign in 1988. However, after the two decades, the literacy rate was not showing the satisfactory result. Lack of infrastructure and proper implementation of schemes dampen progress of education in the country

Sunil Behari Mohanty (1985) has suggested some steps for universalisation of elementary education in “universalisation of Primary Education in India: Lesson of Experience and Pointer for Action”.The suggestions were

i) Poor Families children should provide MDM, reading and writing materials and clothing

Teachers should be allowed to develop schools curricula including school working days and timetable.

- ii) Appointment of schools in specific schools and abolition of transfer system from one school to another.
- iii) There should be the provision of in-service training of teachers in every district.
- iv) Improvement of the quality of administration and supervision by proving pre-service and in-service training.

Pratichi Institute (2012), investigated the impact of SSA on the delivery of education in the North Bengal .in this report various issues have been addressed like staff shortage, availability of classrooms enrolment of SC, ST and private tuition and mid-day meal. The research team reported that 75 per cent of the schools had been provided new classrooms, and average attendance was 62 per cent while 19 per cent of the schools had an average attendance below 50 percent.Mid day meal found to functional 89 per cent of the schools but there are many complaints about the MDM. In respect of teacher allocation, 41 per cent of the total schools had a surplus teacher, and 31 per cent of schools had a shortage of teacher. The shortage of teacher was found higher in Coochbehar (60.6 per cent). It also found that all the schools had the toilet facility, but only 26 per cent of the schools had a proper toilet facility. In respect of community participation, 49 per cent of parents were unaware of this fact. Out of surveyed 267 households in Jalpaiguri, seven students were found to drop out. It is also revealed that inspection of the schools by the authority was quite irregular

Yash Agarwal (1998) suggested about the greater focus is needed in the highly concentrated tribal area and other backward pockets for universalisation of elementary education also stated various dimensions of access and retention in the primary classes in the paper “Access and retention under DPEP-A national overview”. Every child should access to education at a reasonable walking distance. Although above 90 per cent of the population was provided with a school within 1 km distance, some useful parameters were absent in those schools like infrastructure facility, teachers and quality of education. So, a more significant number of students stayed away from primary schools. The study was conducted among the 42 districts covered under DPEP-I and 1993-94 was selected as a base year with 1996-97 as a terminal year for comparative analysis. Yash Agarwal analysed the enrolment trends at all

India level and observed that primary classes enrolment increased by 5 per cent during 70's and by 7 per cent during 80's. The growth rate declined to 0.67 percent between 1993-94 and 1996-97. The decline rate observed in some states like Kerala, Goa, Tamilnadu. Various innovative techniques and models were being regularized to provide quality education, but there were 10 districts (Dhubri, Morigaon, Mallapuram, Rewa, sidhi) where more than 5% decline in class-I enrolment observed between 1996-97 and 1997-98. The comparison between DPEP district and non-DPEP districts provided an idea about the differential progress and the comparison shown that DPEP states (Haryana, Assam, Maharashtra) relatively higher progress in enrolment as compared to the non-DPEP district. The present paper also focused on primary school infrastructure which is an essential indicator of the primary school education. Since DPEP was introduced to make easy access to education in educationally backward districts, it was urgently needed to open a new school or to construct of the additional classroom to avoid overcrowded class room. The availability of classroom space for the instructional purpose is worse in Assam, nearly 20 percent of the school without even a single class room. However, it was found that Kerala state had the average student classroom ratio 31 in 1997 due to a lower population base. Regarding girls enrolment, total enrolment increased from 45.5 percent in 1995-96 to 46.3 percent in 1997-98. Out of the 42 districts surveyed, 16 districts had the experienced of the gender gap. Gender related inequalities should be overcome in the educationally backward districts having a more significant concentration of tribal population by adopting alternative schooling. The literacy among Sc and ST particularly to female is not satisfactory due to low economic status and lower level of earnings. To judge the social inequities, the author calculated the Index of Social equity (ISE) and found that more substantial proportion of children belonging to SC and ST are out of school in some districts in Madhya Pradesh and Assam. The author also calculated internal efficiency from the drop out rate and repetition rate and observed that Assam contributed highest repetition rate, and Kerala contributed lowest. The present paper commented on DPEP goal in 42 districts and innovative & cost-effective strategy to be discovered in place of traditional strategy to make easy access to education in isolate group.

Another study was conducted on the unrecognised school in Haryana (2000) by Yash Agarwal where the author had made a comparative analysis between public & private partnership in primary education. The survey was conducted among four districts of

Haryana, covering 878 unrecognised schools in 13 blocks of 26 selected districts. It was observed that proper records of unrecognised public schools are not maintained, and this is not included also in the educational statistics published by MHRD. Though private schools had a more significant influence on the primary education system, still Govt. is not able to make a clear policy and regulation on it. The author found, there is a presence of the significant portion of private schools in some states like Haryana, Punjab, Bihar, and Uttar Pradesh. During the survey, the investigator found out lower institution cost as compared to Govt. Schools due to lower pay package to the teacher but at the same time, infrastructure facility is quite better than Govt. schools. It was also noticed that sending children to private schools is characterised by the ego needs of their parents. Regarding achievement level, private school children are the better performer than Govt. school children. The author wants appreciable change in attitude and policy in the development of elementary education.

Another serious and most crucial issue focused on quantity and quality of education by Nirupam Bajpai and Sangeeta Goyal in the Paper (2004) "Primary education in India: Quality and coverage Issue" analysed the state of primary education in India. They analysed the paper from socioeconomic disparities, poverty and education, gender disparities, quality of education and the role of the state in providing primary education in India. They argued that there is considerable gaps remain between rural and urban area and the availability of getting education depends on gender, caste, and income. Not only socio-economic determinants, but educational infrastructure in India is also not adequate. They raised a question about the quality of education which is provided by the public education system. The authors also stated that, among 593 districts in India, 309 districts had female literacy rates lower than the national average and 324 districts had a gender gap in literacy rates that were greater than the national average (2001 census). They found the gender gap has mostly occurred in the states of the north because girls usually marry at a very young age and after that, they were engaged in household work. Another anan alarming issue raised by the authors, regarding Sc and ST students' participation in education. Enrollment and dropout rates for boys and girls belonging to SC and ST are a severe issue. Increase in literacy rates doesn't have any meaning without effective literacy in the population. The authors found several reasons for low-quality education due to lack of basic facilities, overcrowded classroom and lack of trained teachers and corruption-misuse of school funds.

Nirupam Bajpai and Sangeeta Goyal (2004) noted that teacher qualification is an essential factor for providing quality education, but here most emphases were given on recruiting teacher from marginalised communities so that education was provided from the marginalised group could create congenial behaviour in the classroom. The authors developed a model shows the interrelationship between community, household, and school. Each of this parameter affects the child's chances of education. However, further study on various interrelationships between other factors is needed to know the main determinants of the social exclusion of SC children. The paper concluded with the suggestions like require holistic approach for promoting the involvement of excluded population by eliminating the critical element of exclusion and a comprehensive and context specific strategy must be adopted to reduce socio-culture reason that gear up the enrolment.

Another study was made on Dumka district in Jharkhand about the primary education status by Kumar Rana & Samantal Das (2004). In conducting the study, from 10 community development (CD), three blocks (Jarmundi, Shikaripara, and Gopikandar) were selected at random basis and among the three blocks, four villages were selected randomly from each block resulting 216 selected sample households for the study in Oct 2002. The research team interviewed 118 male and 78 female; 170 belongs to ST, 22 (SC) and 24 to other communities. The author observed that 12 percent of schools have no classroom and 4 percent have not any building. The primary education progress in this rural region was not able to achieve at a satisfactory rate due to the inadequate number of teacher whereas urban and semi-urban schools have the excess number of teachers. Studies have shown that only 36 percent female teacher is recruited in primary schools. From a total 944 households, 181 (23 percent) never enrolled in the schools and dropout rate was 10 percent; this rate of never enrolled and drop out was quite higher among the SC children due to low-income family condition, hunger, and malnutrition. The education system depends on the proper functioning of the school environment, the attitude of the teachers towards the children, local supervision and control. The research team revealed that an infrastructure problem is one of the main barriers of spreading education among children. The field data showed that, out of 11 schools surveyed, 73 percent needed significant repairs, 27 percent had no drinking water, and 55 percent had no playground.

Along with the infrastructure problem, teacher absenteeism near about 20 percent is also a serious issue which was found to be higher in the tribal village. From a total 43 children responding to question of the subject taught in the schools, 21percent said that no teaching has done on the day during the time visited by the research team While interviewing parents, 33 percent of them expressing their dissatisfaction with the teacher regarding their attitude towards their children. Regarding the quality of teaching an assessment of 63 children from different primary schools,48 percent could not even write their names and 36 per cent could not read fluently; this problem considerably seen among the ST children. This data support the practice of low-quality teaching in schools. As the educational and economic background of these households was weak (especially SC, ST), they cannot provide education support to their children at home or cannot afford private tuition. The author found that 44 per cent of total numbers of general caste children were taking private tuition, but in the case of SC & ST, the rate was 29 per cent and 18 per cent respectively. The poor system of functioning remains in the schools due to lack of poor inspection system and parents participation. There was no regular meeting between teachers and the parents of the children. The fundamental objective of universalisation of primary education cannot be achieved at the desired level for the reasons as mentioned earlier.

Gita Gandhi Kingdon expressed her view about in the article “private & public school in India” (2005). The paper was analysed into following categories i)share of enrolment between public & private schooling system ii) Relative effectiveness and cost iii) Current status of private & public schooling in India. In this paper, the author found out a large discrepancy between household survey estimate and official estimate of private schooling in India due to non-inclusion of unrecognised private schools which leads to an underestimation. Evidence from the 52nd rural Survey, it was found that private schooling enrolment share is underestimated by 28 per cent. Another reason for such discrepancy is that no official records were maintained for unrecognised private schools, though it contributes a more substantial proportion of private primary schools. Total enrolment in private schooling was increased from 56.8 per cent in 1978-86 to 60.5 per cent in 1986-93. The author also highlighted the issue relating to the relative cost of private & public schools and observed that the proportion of salary expenses is much lower than Govt. aided schools. To overcome this issue, the author suggested the public-private partnership (PPP) in India and this PPP model would be the effective model of providing quality education in India.

A report on “Improving School Attendance-A Resource Guide For Virginia School” by the Virginia Department of Education (2005) published a report to serve as an informational source in respect to improve school attendance and to intervene students for irregular students. The report disclosed about three levels of attendance intervention; legal interventions(Enforcing law, Early intervention(reducing barrier to attendance and prevention (establishing expectations and positive school climate. The research team identified the following factors for absenteeism

- i) School factors-it includes school size, attitude of the administrator's teacher and other students.
- ii) Family Factors-It includes lack of parent supervision, poverty, substance abuse at home, domestic violence, etc
- iii) Economic Factors-It includes employment among students, have parents multiple jobs and lack of affordable transport facilities.
- iv) Student factors-It includes mental health problem, poor physical health, lack of familiarity with school attendance and laws.

The study team also mentioned about some social and economic related issues regarding the barriers to school attendance, and it includes association with wrong people or friends, putting time for household works, believing that school does not offer interesting and rewarding classes or activities, transportation problems etc.

Reetika Khera (2006) expressed her opinion about MDM's achievement and challenges in her paper “MDM in primary schools: Achievement and Challenges”.MDM success stories faced some challenges in the urban area partly due to crowding, inadequate and lack of hygiene. The nutritional effects of MDM depend on the quantity and quality of MDM provided in the school. The lack of adequate infrastructure and hygiene weaken the objectives of MDM. The author identified three major infrastructure facilities which remain major challenges for the Govt i) water facilities ii)Kitchen shed and storage facilities iii) cooking and serving utensils. The author concluded that the success of the programme would be possible with the involvement of public and private partnership and regular vigilance by the authority.

Robert Jenkins and Eimar Barr (2006) in the paper “Social Exclusion of schedule caste children from primary education in India” reviewed the underlying causes of the disadvantaged status related to the primary education of children from Scheduled Caste. Though there has been a significant improvement in overall literacy rate, quality of education is a major consideration due to lack of activity-based learning and child-centric learning arrangement. The disparity in primary education occurred due to castes, economic group, and sex, rural and urban characterisation and also leads to the social exclusion of Schedule Caste children. In this paper, the authors showed that SC population are the disadvantage when compared to other backward classes (OBC) and Schedule Tribe (ST) concerning education status. This paper highlighted the reasons for the disadvantaged status of scheduled caste children from primary education. As the PROBE (Public Report on Basic Education) report concluded: “In many areas, villages are divided into separate hamlets, children from one hamlet may be reluctant or unable to go to school in another hamlet due to caste tension”. Another factor of social exclusion of SC children is that sensitivity of teachers to caste-based discrimination.

Rajshri and Dora (2006) in “ the impact of school lunches on primary school enrolment: Evidence from India’s midday meal scheme” highlighted assessment of the enrolment effects of MDM. The data incorporates 5,00,000 schools observed annually from 2002 to 2004.the study revealed that primary school enrolment has increased by 18 per cent in grade I and 19% in grade II. It also observed that there is a positive correlation between improved nutrition from MDM and learning achievements. The paper also examined the gender disaggregated response in enrolment and enrolment in girls is higher than boys.MDM is not a significant factor to alter the gender gap in primary schools enrolment.

Kumar Rana (2006) expressed his views regarding impacts, problems and possibilities of mid-day meal (MDM) in the paper “the possibilities of the mid-day meal programme in West Bengal”. With the introduction of MDM, the initial impact was found positive in respect of attendance of the students. In this study, the research team found a different response from different class based on the interview. Majority of SC, ST and other poor people wanted a cooked meal for the children, while other relatively affluent people consider it unnecessary and also harmful to schooling. In order to draw a broad picture of MDM, the

study was done in Bhirbhum district of West Bengal. For this study, 15 primary schools (five from each block) were taken where the MDM had been operative and another 15 primary schools (five from each block) without having the programme. The presence of hunger a negative force in the classroom and it exists in large extent in Bhirbhum, Murshidabad, Puruliya and Jalpaiguri. A comparative study was made on an average attendance of students, and it shows that 10.1 per cent point increase in the rate of attendance and that the attendance of the children was much higher among Dalit, Adivasi and Muslim. The major complaints about the MDM were the quality and dullness of the menu. Not only that, inadequate infrastructure, ingredients, low remuneration for the cook raised the problems of MDM. Many of the teachers argued that most of the effective teaching hours disrupts the teaching activity due to MDM arrangements, particularly in the school with high enrolment. Apart from these problems, nearly 80 per cent of the parents actively accepted the MDM. With the help from parents support, parent-teacher relationship become cooperative which leads to high enrolment in the class due to regular discussion took place between them in a friendly environment. The author concluded the paper with some remarks such as more extensive public participation, decentralisation of power, utilisation the unused land to generate income (such as planting trees) and above all, serious willingness will be required from political parties.

A. Pandey (2007) examined the various dimension of access and retention in SSA, mainly focused on gender disparity in education. Though the higher enrolment found in girls dropout rate still higher than boys. It was found that, due to socio-cultural and economic factors, girls have not been able to take the full advantage of UEE. For this, active community participation is required through panchayat and VEC. NGOs and other local communities should be actively involved in girls education and other gender-related issues. The paper highlighted the efforts and commitments Mahila Samakhya programme in respect of enrolling children into primary schools. To ensure the girls' enrolment in the SSA programme, VEC should be formed, and gender sensitisation camps should be formed for proper implementation of SSA.

Universalisation of elementary education is the basic objective of SSA. The objectives can be fruitful if the teacher remains available in the school and deliver quality education. Delivery of teaching process also depends on the students' attendance. A study was

conducted by the Research, Evaluation, and Studies Unit (2007) on the topic “Study of students’ attendance in primary and upper primary schools”. The research team conducted the extensive study by taking 5188 primary schools in sample spread over 20 states (Andhra Pradesh, Bihar, Karnataka, Maharashtra, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, West Bengal, Gujarat TamilNadu, Himachal Pradesh, Jammu & Kashmir, and Delhi). The present study revealed that the overall attendance rate of the primary level is 68.5 percent, Bihar having the lowest (42.2 percent) and Himachal Pradesh contributed the highest attendance rate at 94.6 percent. They also pointed out that, there is an average gap in attendance rate between the first hour and last hour of the school working hours. The attendance rate of SC, ST and Muslim students in the first hour is quite less than that of total students. The class-wise analysis shown that the attendance rate is the lowest in Class-I (65.6 percent) and it increases slowly from class-I to VIII. Moreover, still, there is an average gap of attendance rate in rural (68 percent) and urban (71.2 percent) primary schools. During the unannounced visit, the research team found that teacher attendance in primary school is 81.7 percent . Lowest absent rate of the teacher was found in West Bengal, and it was quite high in Madhya Pradesh and Assam. The research team listed out the possible reasons for students’ low attendance on the basis of information given by head teachers, teachers, village education committee. Reasons are i) child usually busy with their domestic work and keep them engage with their parents in their occupational work for earnings. I) Temporary migration iii) Parents’ indifference iv) lack of basic facilities in school iv) difficult access to school due to lack of transportation v) teacher shortage v) unattractive school environment vi) poor quality of teaching.

Ever since its inception in 2000, the SSA has played an impressive role to ensure elementary education. In the paper “How far have we come in Sarva Shiksha Abhiyan” by Amarendra Das (2007) emulated a realistic assessment of SSA. As per census 2001, Kerala was the highest literacy rate (91 percent) and the lowest (47 percent) in Bihar. Most of the developed states like Maharashtra, Tamilnadu, Punjab, Gujarat, Karnataka, and Haryana performed satisfactory rate in literacy. However, the literacy rates on the gender basis showed a discriminating picture except for Kerala, Maharashtra, Tamilnadu, and Punjab. The author has expressed his serious concern about the dropout rates. The paper also focused on the enrolment in the Government school, and it has observed that, between 2003-04 and 2004-05, there had taken place a decline in the percentage of enrolment in Government Schools. Role

of the Government is of particular importance to the universalisation of elementary education. However, the result showed that basic education facilities were not provided in many state schools, as reported that "there is not a single state, which has more than 90% of school in good condition". Undoubtedly, the quality of education depends on skilled teacher and fact is that except Andhra Pradesh, Haryana, Kerala and West Bengal, in all states more than 10% of the primary school have only one teacher for five classes. There is also the inadequacy of pupil-teacher ratio (PTR), The author had shown that Bihar, Jharkhand, UP and West Bengal exceed the PTR of 50, only states like Andhra Pradesh, Assam, Kerala maintaining low PTR of 30. To enhancing enrolment, attendance to the universalisation of elementary education, the Central and State Government need to improve efficiency regarding innovative policy intervention.

The overview of school education in India is expressed by Geeta Gandhi Kingdon (2007) in the paper "the progress of school education in India". The author compared the literacy rate in India along with other International Countries in the BRIC group (Brazil, Russian Federation, India, and China). The data showed that, India's literacy rate better than Pakistan and Bangladesh while it lags substantially behind all the other BRIC countries and Sri Lanka. The author analyzed the schooling access and quality in primary education and stated that school enrolment in secondary level is low due to a shortage of school in nearby and this leads to the increase of private schooling system. Gender disparity in secondary school is seen Bihar, Rajasthan, Jharkhand, and Chhattisgarh. But this disparity is quite low in Kerala and Tamilnadu. Despite schooling access quality, the attendance rate is also a major indicator of schooling participation than enrolment rates. From the report NFHS-I (National Family Health Surveys) and NFHS-II in the 6 year period, it was observed that very significant improvements in their current school attendance rates particularly in rural area, except Gujarat, Bihar, and Orissa. But at the same time, the author stated that attendance rate does not guarantee grade completion. Over this 10 years (1991-2001), the gender gap reduced substantially especially in Madhya Pradesh and Rajasthan. The literacy rate increased largely in Uttar Pradesh and Andhra Pradesh. On the basis of a survey carried out by Pratham (2006), revealed that near about 47 percent children in grade V could not read story text at grade II level and in Mathematics, 55 percent of grade V and 25 percent of grade VIII children could not solve a simple mathematics. On the basis of data survey (2005), West Bengal, Haryana, Bihar, Uttaranchal, Chhattisgarh less than 50 percent children could not solve a simple

mathematical problem. School quality is another serious issue which directly depends on the education system. According to a survey among 242 villages across five North Indian State (Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, and Himachal Pradesh) by PROBE (1999), reported that 26 percent of schools without the blackboard, 52 percent had no playground, 59 percent no drinking water, 77 percent no library. These statistical figures showed that existence of very poor infrastructure facility in primary schools. These basic problems have encouraged the introduction of private schools in India. Nearly 96 percent of the total increase in urban primary enrolment was due to the growth of private schooling. Here, the author compared the effectiveness of private and public schools. According to the report (Pratham, 2006), it was found that private schools students could able to read the text and solve the mathematical problem more easily than Government school students. The author has also expressed views in regard to the relative cost of education in private and Government schools and found out from the data from five different states in the early to mid-1990s that private school teacher's salary was about 40-50 percent of Government teacher. From this paper, it was observed that India's educational achievements are one of the mixed successes.

The SSA was initiated to achieve the goals of universalisation of elementary education of satisfactory quality, reduce overall dropout rates, increase average learning achievement rate . The most challenging task of SSA is to enrolling and retaining children. The paper "Enrolling and retaining slum children in Formal school-A field survey in Easter Slum of Kolkata" focused that retaining the students in a formal school is far more difficult from enrolling them by Ratan Khasnabsis and Tania Chatterjee (2007). The field survey was made among 9,969 children from 104 schools spread over 11 wards of east Kolkata between November 2003 and July 2005. In the sample design, three types of schools were chosen for the study; Kolkata Primary School Council (KPSC), Kolkata Municipal Corporation School (KMC) and Shikshalayan. The authors found out from the selected samples that, literacy rate was 70% and literacy rate is closely related with the literacy level among the mothers. As, physical facility of the slum area are quite adverse, students from this area are frequently absent due to ill health and sickness. Migration is an another factor behind the hampering the education system in that region, While survey was made among 9.969 students, it was found that gender ratio is maintained only in Shikshalayan (50.32 percent) and it is maintained

because schools are situated at very close. Another factor came out from the survey that students of a large number do not study in the age-specific relevant class due to lack of interest in the academic which leads to low enrolment ratio. The attendance behavior of the students suggests that only 38.6 percent of the students were attending regularly in the school daily. To find out the causes of low attendance, the author used a regression analysis (sample size 250 households) with the percentage of class attendance by a student during Nov 2003 – April 2004. The regression result analyzed that there are three factors which affects the attendance of the students, like i) Types of the schools ii) the education level of female guardian iii) per capital income of the family. Per capital monthly income reversely propionate while education level of female guardian directly propionate to attendance of the students. Attendance of the students significantly depends on the types of the school which had a better infrastructure. The authors also focused their views on retention problems and observed that 78.52 percent student was retained in the next session, but at the same time 36.75 percent of the students left school only after two successive sessions and it was predicted that retention rate would go down in subsequent session. From the field data, it was observed that it is challenging to retain children who were mainly from disadvantaged families.

Indian Institute of Management (IIM), Kolkata have made a Monitoring and evaluation report for Maldah, Dakshin Dinajpur and Darjeeling in 2007-08. They have taken a sample of 80 schools in Maldah, 83 schools in Dakshin Dinajpur. For the Darjeeling district, they analysed the DISE data for 2006-07 as made available by NUEPA (National University of Educational Planning & Administration). They found that the Government has taken steps like Total Sanitation Campaign (TSC) for providing drinking water facility in schools. However, the provision of TSC has provided only 30 per cent of schools. However, in the Dakshin Dinajpur TSC has taken place in 70 per cent schools. In Darjeeling district, according to DISE data (2004-05), toilet facility for girls was available only 8 per cent, and drinking water facility was available in 29 per cent schools. Textbooks were available in all school and all students in 88 percent of total school in Maldah district and 92 percent in Dakshin Dinajpur

However, in Darjeeling district, textbooks were distributed not even 1 per cent of the total students. To enhancing enrollment, retention & attendance and simultaneously improving nutritional level among children, the National Programme of Nutritional Support

to Primary Education (NP-NSPE) was introduced. In Maldah district and Dakshin Dinajpur, mid-day meal (MDM) was running 83 per cent and 81 per cent of the total schools, respectively. In Darjeeling district; the research team observed an increasing trend in enrolment at primary level due to SARVA SHIKSHA ABHIYAN interventions, but stagnation trend was noticeable in upper primary level. Enrolment increased by 36 per cent over the last three years. There is also a positive influence of infrastructure on SSA. According to DISE data, 3 per cent of the primary schools and 2.4 per cent of upper primary schools did not have proper infrastructure facility

A study was conducted (2008) to assess the quality of civil works in Siliguri Educational Districts covering 60 schools in Matigara, Naxalbari, Phasidewa, Kharibari and Siliguri Municipal Corporation. It was observed that 52 per cent of the schools have completed civil works, and most of the schools did not have the facility of electricity and 73 per cent of the schools have the toilet facility. The research team also observed that there were no proper drinking water facilities and 67 per cent of the schools have the boundary wall. There was a persistent problem of seating space, and it was found that 130 students used to sit in one small classroom. Only 88 students of school going age returned drop out in the Siliguri Educational district, and this rate was very negligible as compared to the other parts of the country. At the same time, it signifies the success of the movement Education for All advanced by Sarva Shiksha Mission in this region. By promoting proper development to schools regarding civil works, the success of elementary education can be felt more fruitfully.

The Main aim of Sarva Shiksha Abhiyan is to provide useful and relevant elementary education for all children in the age group 6-14. But Nitya Rao (2009) identified a perception of poor quality of the SSA and also lack of understanding by the programme of social relation and structure constraints in the paper "Structural constraints in SSA schools". The study was conducted in Borio block, Sahibganj district of Jharkhand, with 330 households; 176 Santals and Mohli (ST), 94 Hindus (OBC) and 60 Muslim households.

According to village survey (2006), revealed that 32.4 percent of the village population is literate which adversely affect the literacy level in graduation and post graduation (less than 1 percent). With the launching of the SSA, some initiatives were taken to universalise access to elementary education in Mohali and Muslim area. The author made a comparison between the current Govt. School and new primary school (NPS). The author

highlighted an essential issue that reflecting discriminatory practice about both children and teacher.

Regarding children, due to poverty, children often go to work rather than the school. Another aspect about the teacher, as per Govt. notification, NPS is running only by a Para-teacher drawing salary Rs.3, 000 per month. So, there has been a considerable mobilisation of Para-teacher in search for a supplementary source of income. There is a considerable inequality with the regular teacher in respect of earnings. To, provide quality education, teacher motivation is utmost necessary to fulfil the objectives of SSA. With the monetary incentives, regular meeting activities at the block level, cluster level with the head teacher, assistant teacher, is also required for improving the quality of education as prescribed by the SSA. The author suggested that truly quality education can be provided to the poorest, most marginalized and the backward section of the society if structural constraints are eliminated.

It is often argued that children remain out of school because their family needs income from their labour. But at the same time, it is also said that a large majority of out of school children are not engaged in full-time work. Awareness campaigns and community participation should be arranged to attract SC.ST children for enrolment and retention. The implication of community participation through social education management committees (SEMCs) under SSA has focused on “ Lack of Community Participation in Sarva Shiksha Abhiyan: A Case Study” by Vasanta Srinivasa (2009). The study was conducted in scheduled tribe (ST) Rampachodavaram Agency area in East Godavari district of Andhra Pradesh. Three mandals (Y Ramavaram, Gangavarem, and Maredumilli) were specially selected out of seven mandals in Rampachodavaram Agency, to track the impact of SSA through SEMCs . A multistage sampling method was done for the selection of the mandals, the sample size was 26 villages among the total number (262) of villages in three mandals, and 125 respondents were selected among parents of school going children, PRI (Panchayati Raj Institutions) and school teachers and SEMCs members. The author observed that 67 per cent of categories were well known about SSA and 50.4 per cent were not aware of the micro-level planning for school functions and more than 87 per cent of the school teachers were not aware of this component. It was observed that near about 50 per cent of the respondents revealed the non-existence of SEMCs and 50.4 per cent were not aware of the own membership of SEMCs. When the author had surveyed the necessary facilities available in the school, disclosed that

abysmal level of availability with TLM, electricity, separate classroom, room for teachers, drinking water, toilet. Regarding the participation of SEMCs members in the monthly meeting, data revealed that nearly 70 per cent of the respondents reported about the no participation in the monthly meeting and also reported that they were not aware of the financial resources that the school receives.

The author found out some causes for the low participation like lack of training or orientations and workshop. Some suggestions were received from SMECs member to improve the function of the education committee at the village to implement education committee successfully, such as tribal parents should participate in school-related activities and make them aware about the value of education.

Savita Kaushal (2009) reported about the status of MDM in Rajasthan and also identified the best practices in the implementation of MDM in the paper "A study of best practices in the Implementation of MDM programme in Rajasthan". The following observations were obtained from the study

- i) Cooks were appointed by SDMC committee members and menu of the food is displayed in the school. Besides seasonal fruit is given to children once a week.
- ii) Teacher was entrusted with the responsibility of buying food items for children, and it did not disrupt the classroom activities.
- iii) Children used to wash hands properly before MDM, and all the kitchens had the provision of kitchen shed.
- iv) Akshaya Patra, largest NGO strives to eliminate classroom hunger and supporting to the socio-economically disadvantaged children by providing education. In Rajasthan, Akshaya Patra(NGO) served mid-day meal more than 1.5 lakhs children per day. The programme is managed by the ultra-modern centralised kitchen to ensure minimised human handling and maintaining a good standard of hygiene and cleanness.

Sarmistha Paul (2009) argued in the paper "Public infrastructure, the location of Private Schools and Public Attainment in an Emerging Economy" that public infrastructure has a great impact on the presence of private schools in a community and it ensures a high return to private investment. The public or Govt. Schools in India are facing challenges due to the rapid increase of private schools in India. From the PROBE study, it was found that private

schools in the village are providing more infrastructural facilities than compare to Public schools. Pass rates are significantly higher in village private schools, and private school presence affects lower enrolment in public schools.

Programme Evaluation Organization has done the Evaluation report on SSA (2010) among eleven states and two union territories for the period from 2003 to 2007 to identify the constraints in the implementation of the scheme and also how far SSA has been able to achieve its objectives and related targets. In this study, a multi-stage stratified sampling has adopted. The study showed that in all about 90 per cent of the rural population having access to an elementary school within 3km. With the State Govt. intervention, private schooling also plays a significant role in Chandigarh, Haryana, and Rajasthan in providing education. The overall gross enrolment ratio increased to 93% in 2007, but some states GER declined due to child population, outward migration and existence of private schools. The paper also highlighted the critical issue about the infrastructure facilities which significantly improved in most of the schools, but 60 per cent of the rural schools suffer from electricity facility. TLM has used 91 per cent of urban schools as compared to 77 per cent of rural schools. Motivations levels of the teacher were also surveyed and found that 54 per cent teacher in rural schools & 76 per cent in urban schools teacher was not interested in non-teaching activities. The study also revealed that some union territories spent a higher proportion of their expenditure on quality education. With this findings, the team also pointed out some constraints like i) teacher shortage ii) lack of universal enrolment due to seasonal migration, illiteracy, economic backwardness iii) weak supervision. Universalization of elementary education can be succeeded its aim totally, if following suggestive measures are taken like i) opening new upper primary schools ii) policy of no detention by all States iii) transport facilities should be provided primarily in remote area iv) cost of education should be provided at free of cost v) introduction of biometric system of recording teacher attendance. With this, all recommendations, social, regional and gender gaps can be reduced through the universal education programme. The committee also recommended the social audit of the scheme.

.S.Deodhar and S. Mahandiratta (2010) conducted a survey and published an article on “an evaluation of mid-day meal scheme” and remarked that hygiene factors seemed to be missing as they observed that children were required to wash their plates after the meal by

using the playground soil. The authors tested the MDM in terms of nutritious, food safety and laboratory result revealed that nutritional level is not sufficient as per norms they have suggested about the involvement of private entities and NGOs in delivering of MDM and inclusion of fruits in daily meal.

A.K.Sharma and Samiksha Singh (2010) studied the impact of MDM run by NGO on the growth of the Primary schools' students in rural area Of Mathura district in the paper “ impact of NGO Run Mid-day Meal Programme on Nutrition status and Growth of Primary school Children”.Enrolment was found higher for girls in local schools whereas boys enrolment was higher in Private schools in district headquarter.MDM effects the growth rate of children. It was found that NGOs had no better impact on the growth of primary schools, but it reduces the prevalence of vitamin deficiency.

A survey was conducted of all India basis on out of school children of age 5 7 in 6-13 years age group by social & Rural Research Institute (2011). The survey was conducted in all states and the union territories of India during Feb-May, 2009, covering 99,226 households. It was observed that 38.07(5.23 per cent) lacks children aged 11-13 were out of the school compared to 43.44 lacks (3.69 per cent) children in the age group 6-10 years. The total 8.15 lacks (4.28 percent ) children were out of the school, and this proportion is quite higher in case of girls. The percentage of never attended school children was 75.99 per cent in rural area, and this ratio is quite higher in some states like Andhra Pradesh, Assam, Himachal Pradesh, Meghalaya, Orissa and West Bengal. Out of school children were estimated to 81.50 lacks, 25.1 percent (20.46 lacks) of those children were drop out and the percentage of drop out is relatively higher in Class I, II and V. It was also found out that, the percentage of never enrolled children is quite higher in rural area and it was estimated 4.53 per cent (70.24 lacks) as compared to urban area where it was 3.18 per cent (11.26 lacks). The school participation by different social group (SC, ST, OBC, Muslim & others) were also considered in this study. A significant portion of this category was deprived of accessing the education and also it was reported that 28.97 lacks children were found to be with special needs(CWSN) and among them 34.12 percent children were out of the school. The survey result also highlighted the issue of private schooling, and it was observed that an increasing trend of enrolling in private schools in some states like Punjab, Manipur, Goa. As education is depended on family

economy, drop out is mostly caused by the poverty/economic reasons in states like Bihar and Uttar Pradesh

The ASER (Annual Status Education Report) 2011 survey was conducted to assess the status of children schooling and primary learning achievements and to compare this result with the last year (2010) data. The sampling was done in all rural districts covering 600 households per district. This sample was obtained by selecting 30 villages from each district. It was found that private schooling enrolment in rural India has increased by 5.5 per cent and enrolment in North-west State(Punjab, Rajasthan) have a very high percentage of enrolment in private schools.ASER measured the effectiveness of the school system and found that a large proportion of children cannot read the text without the tutor. It was also observed that the learning level of Government schools drop substantially, especially in Rajasthan, UP. Bihar. The learning levels of children were compared among the states like Karnataka, Tamilnadu, Punjab, Haryana. It was revealed that Punjab had shown steady improvement in all levels of children between Std I to std V. The survey result showed that about 3.4 per cent of children in the age group 6-14 not currently enrolled in school whereas as private schooling participation increased to 25.6 per cent in 2011. In regarding teacher attendance, on average 87 per cent of all teachers were found to be present in the school, but children attendance declined in rural primary schools from 73.4 per cent to 7.09 per cent in 2011. The research team found the facility of the computer in schools and Kerala experienced a high percentage (78 per cent) computer facility in primary schools. With the planned efforts of universalisation of elementary education, the literacy rate in 2011 has increased to 74.04 per cent, not only that; female literacy rate increased from 53.67 per cent to 65.46 per cent in 2011 while male literacy rate rose from 75.26 per cent to 78.21percent.

Epstein and Sheldon (2012) identified five key programme parameters on their article “Getting student to School: using family and community involvement to reduce chronic absenteeism”.The authors observed that school, family and community partnership could effectively decrease chronic absenteeism in the school. They identified five key variables to reduce absences in the schools. These are

- i) A regular visit to homes to frequently absent students
- ii) Rewarding students for improving attendance

- iii) Establishment of a relationship with parents
- iv) Conducting a workshop for families about attendance.
- v) Taking the help of counsellors for chronically absent student

Gouri Sankar Bhunia and Pravat Kumar (2012) has been attempted broad mapping and analysis of existing infrastructures facilities in Paschim Medinipur. The study revealed that 15.84 percent of the schools in primary level had the facility of girl's toilet facility. Highest girl's toilet facility was found in Daspur I block (29.46 percent). The overall drinking water facilities available 98.24 percent but the electricity facilities have been recorded 10.68 across the district. Availability of ramp facility in the district was 55.81 percent. Availability of boundary wall indicates safety measures of the school. It has been recorded very disappointing result in respect of availability boundary wall, playground facility and class room's conditions. Prof Berner had established the positive relationship between student achievement and infrastructure condition in the phrase "Good infrastructure is truly at the base of the quality education". The authors found that infrastructure facilities are not sufficiently distributed across the district due to socio-economic barriers, political problems, and low accessibility of the area.

Yawar Hamid and Asmat Hamid (2012) attempted to assess the impact of MDM on attendance, enrolment, drop out of children in primary schools of district Anantnag in Jammu Kashmir. The study was undertaken by interviewed 100 students, 50 parents, 20 teachers and 20 Govt. Officials. The study revealed that MDM has produced a significant positive impact on attendance and drop out in both general and reserved categories. With the MDM, Sarva Shiksha Abhiyan also contributed to a great extent for increasing enrolment and decreasing drop out. However, the quality of the food is not satisfactory, and with this financial assistance & supervision and monitoring, the programme is also not adequate.

Farzana Afridi and Bidisha Barooah (2013) studied a specific mechanism which could improve student's learning in public schools in Delhi. The authors measure the student's performance by solving a puzzle of increasing difficulty within a specified time. The results suggested that schools meals positively affect classroom concentration. The study concluded that free or subsidised meals could improve the performance of students in classrooms

Janmejaya Samal (2014) discuss public health concern of MDM which requires greater attention from the administration in the paper "Mid-day meal menace in Bihar: The Public Health Concerns of the Tragedy". Death of 23 children after the MDM consumption in Gandaman Dharmasati Primary Schools of Chapra District in Bihar (2013) was an example of point source epidemic. The report shows that the presence of pesticide in MDM and it is evidenced that lack of proper food surveillance measure. The Forensic science Laboratory (FSI) reported that a high quantity of organic phosphorous pesticide was found in the MDM. the public health service in this district did not have proper facilities to respond quickly against the poisonous food. UEE concerns about accessibility and equity, but in reality, there was also not enough fast transport to cope up this situation.

Jabir Ali and Mohammad Akbar (2015) analysed the differences in pupil's satisfaction on various aspects of MDM in the research paper "Pupil's satisfaction with school MDM meal Programme: A comparative study of centralised versus decentralised kitchens". The study was conducted through interview of 1200 children of primary and upper primary schools of four district of Uttar Pradesh. The result shows that most of the respondents were highly satisfied with the MDM programme. However, still, considerable improvement should be made in the quality of the food, social bonding, hygiene and health-related issues. There is a significant difference found in the satisfaction level on MDM supplied through centralised and decentralised kitchens by using ANOVA techniques.

Kamile Demir and Y.A. Karabeyoglu (2015) have been made attempted to investigate the effect of individual, family, and school variables on absenteeism among school students. For the study, survey had been done amongst 581 students. As per the study, commitment to school, control of the family and school environment have a significant effect on attendance. In the research, commitment to schools includes commitment to teachers, commitment to friends, and commitment to schools. Among these, three variables, commitment to the teacher is the most potent variable. commitment to schools begins with teacher-student relationship (Marvul, 2012). The model developed by the investigators found that control of parents has a significant effect on attendance. i.e family attitude and circle of friends can be major motivational factors against absenteeism.

Richard Coelho, Sierra Fischer and Forres Mcknight (2015) evaluated the marginal impact of first-grade absence on student achievement on a third-grade standardised test. Consistent attendance helps students to build a foundation for the development of the future. Poor student attendance is a cause of failure in college-level education. The study revealed that absenteeism is harmful to student performance in math and reasoning skills. The researcher identified that each day absence is correlated with a reduction of math score by 0.4 points and 0.2 points in reading the score. The highest rate of absenteeism was found from students belonging to a low-income group or members of an ethnic minority

Madhumita Bandhopadhyay (2016) have been made attempted to analyse the present status of availability of infrastructure facilities in schools. RTE, 2009 has recommended that each school should be equipped with “ all-weather building consisting of at least one classroom for every teacher and office- cum- store –Head- Teacher’s- Room: barrier-free access, separate toilet for boys and girls:safe and adequate drinking water facilities to all children; kitchen where mid-day meal is cooked; playground; boundary wall or fencing ”The above study was made from secondary data, DISE.The following facts were observed:

- i) An increasing trend is found in private schools in respect enrolment and the opening of new schools. In India,19 per cent of the schools were run by private management.
- ii) Student classroom ratio was higher than the national average (27)in the states like Assam, Bihar, Chandigarh, West Bengal..
- iii) 90 per cent of the Private schools are well connected by all weather road, whereas 135 of the primary schools are yet to connected.
- iv) 98-99 per cent of the Govt. primary schools have their building, but Bihar and Uttaranchal where more 10 percent of the Government Schools do not have the school building.
- v) 95.6 per cent of the Government Primary schools have water facilities, whereas 99 per cent private schools have this facility.
- vi) 88 per cent of the Govt. primary schools have the facility of girl’s toilet, but the majority of the private schools are well equipped this facility. However, in Andhra Pradesh (55 per cent) , Meghalaya(54 per cent), Assam (76 per cent) private aided

schools are functioning without a girl's toilet. The provision of Boy's toilet facility is much better than compared to girl's toilet. 95 per cent of Government as well as private schools have the facility of Boys' toilet.

vii) In respect of the boundary wall, playground and electricity facilities, 50-55 per cent of the govt Schools have these facilities whereas 70-80 percent of the private schools are well equipped with these basic needs.

viii) It has been found that only 13.5 of The Govt. primary Schools and 45.80 per cent of the private primary schools have computer facility. So, it is understandable of the fact is that making of digital India is not possible without computer-aided learning.

Tanika Chakraborty and Rajshri Jayaraman (2016) studied the effect of the MDM programme on children learning outcomes in the discussion paper “ school feeding and learning achievement: Evidence from India's Midday meal Programme”. The study based on secondary data from ASER. The MDM helps to increase test score and mathematical ability. The authors found a positive co-relation between MDM exposure and test score. The test score is lower for girls than comparing to boys. The study revealed that MDM has a significant effect on learning achievement with a test score in primary schools, increasing by 18 percent for reading and 9 percent for mathematics.

## **2.5 Over view of the Studies**

The universalisation of elementary education includes the objectives of achieving universal primary education, i.e. to ensure that all children complete primary schooling. One strand of literature examines how far elementary education achieves its objectives. Gita Gandhi Kingdon (2007). Nirupam Bajpai & Sangeeta Goyal (2004), Amarendra Das (2004), Nitya Rao (2009) found that SSA has made impressive strides in seeking to ensure universal elementary education. However, at the same time, it was observed about so many common problems exist which were pointed out by the authors as mentioned above like, lack of quality education, an infrastructure facility, inadequacy of teaching staff, etc. Yash Agarwal (1995) argued about the universalisation of elementary education in backward pockets, and here, the author found out the same problems as others. The above all the paper analysed the determinants of school participation using survey data. Indian Institute Of Management, Kolkata (2008) published a report about the progress of SSA in West Bengal and addressed

their primary concern in the basic facility in schools, availability of textbooks, Midday meal, VEC, etc. Robert Jenking & Eimar Barr (2006) found out in order to address all of the determination of social exclusion. It is essential for any intervention designed to reduce disparities to include strengthening local capacity to manage a comprehensive response. Research, Evaluation Studies Unit (2007) pointed out, children from SC, ST, OBC have lower attendance in school than that of total students. Ratan Khasnabasis & Taniya Chatterjee (2007) examines reasons for the poor attendance behaviour of student in formal schools, and they observed that retaining the students in a formal school is far more difficult than enrolling them, mainly if the students are from an impoverished economic background. This problem could be managed by promoting community participation in school education (Vasanta Rao, 2009). By implementing community participation and MDM (Kumar Rana, 2007) programme participation in school education can be ensured. Another major issue in elementary education is the existence of private tuition. Amartya Sen (2009) expressed his deep concern about private tuition in primary schooling in West Bengal and the reformation of private schooling curriculum.

The literature as mentioned earlier attempted to focus on the problems of mid-day meal from different aspects such as quality, hygiene issues and also the perception of the parents, teachers and students about the midday meal. Some of the studies attempted to examine the effect of mid-day meal in respect of attendance, enrolment and retention and learning achievement. MDM issues in different aspects were studied by Kumar Rana (2006), S. Kaushal (2009), A.K. Sharma (2010), Y.Hamid (2012)J. Ali (2013)T. Chakraborty (2016). Besides these, the influence of NGO on MDM was studied by A.K. Sharma(2010). On civil works, a good number of studies were carried out by the several research institutions. In infrastructural context, the studies were carried out by IIM, Kolkata (2008) Programme Evaluation Organisation (2010), Social & Rural Reseach Institute (2011). Besides, several studies were conducted by S.Paul(2009), G.S.Bhunia(2012).M.Bandhopadhaya (2010).

Regarding attendance of the primary students, the influence of different factors was studied by Epstein and Sheldon (2012) and R. Coelho (2011). Regarding learning achievement of the primary students, ASER (2011) surveyed to access the learning achievements of the students.

The papers as mentioned earlier analysed the state of primary education. Using various data-source and secondary research described salient features of the public education system for primary schools as well as educational outcomes. The development of the above mentioned studies provide significant support to formulate hypothesis for the present study.

## **2.6 Distinguishing features of the study**

After reviewing the above studies, the investigator attempts to incorporate these features into the present study. From the above discussion, the researcher found that there were so many projects; researches were conducted at the national and state level on the performance of SSA and other related factors that affects SSA progress and implementation. However, the investigator has not found any published relevant research paper or articles that evaluated & analysed the role of SSA in Jalpaiguri & Rajganj block. So, in the above context, the researcher will try to evaluate the role of SSA in Jalpaiguri and will make a holistic comparative analysis between these two regions. So, the area I am researching is to my knowledge a virgin field of interest that requires careful investigation.

While studying on the present research work, a few studies were carried out related to SSA in respect of girl's education, civil works but have not found a relevant study regarding the role of SSA towards in achieving education for all in rural and urban areas of Jalpaiguri district. The investigator has not found any recent study on the role of SSA in Jalpaiguri district. The present work has planned to study the role of SSA in achieving education for all in rural and urban areas of Jalpaiguri district on the basis of gaps as mentioned above.

## **2.7 Rationale of the study**

Primary education plays a vital role in the educational system in India. From 1950 onwards there has been an urgent demand for the introduction of universal, free and compulsory primary education. To fulfil the demand, the SSA was launched in 2000-01 in Jalpaiguri district. To respond positively to this demand SSA was a significant move toward the implementation of policies undertaken by the Govt. of India. My preliminary investigations of SSA in this district have revealed that the performances, as well as the success rate of SSA, have not been satisfactory. My understanding of this situation suggests

that the lack of proper communication between policymakers and those who implement these policies has somehow hindered the overall aims of the programme. Besides the failure of introducing updated course curriculum and teaching methodology, lack of infrastructure etc. has limited the effectiveness of the programme making both teachers and students apathetic to the whole more.

The purpose of the present study besides analysing what has been said above is also to offer possible changes in the existing SSA programme in Jalpaiguri regarding the modernisation of teaching-learning methodology. My research paper could also suggest ways to establish a balance between policymaking and policy implementations for effective universalisation of education system in Jalpaiguri.

Chapter –III

**Theoretical Orientations**

# **Chapter –III**

## **Theoretical Orientations**

### **3.1 Introduction**

Education is the entryway to the social and economic progress. Education opens up rational thinking and creativity to the human being. Modern society demands skilful knowledge to participate in various economic activities. Education plays an essential role for empowering to the individual with skills and knowledge and makes enable to the precious human resource in future. Improvement in education brings efficiency and quality in life. Quality education is necessary for every individual for social and economic reforms. India is now entering her 70th year of independence, but still today the Govt is struggling to reduce discrimination in respect of equality and justice, which only proper education can enlighten on it. The inequality in society exists due to the difference in the knowledge of different individuals. In keeping with that, the education system has been developed for developing knowledge and related skills for leading a meaningful life. The education system has to be designed in such a way to equip every citizen with essential knowledge and skills. Swami Vivekananda said, “Education is the manifestation of the perfection already in man”. The development of education is a continuous process, and it was stated from 2nd millennium BC. The development of education system in India can be broadly divided into three categories viz Pre British period, British Period and post-independence period.

### **3.2 Importance of Elementary Education**

There are four phase of education system prevails in India mainly primary, upper primary, secondary education and higher secondary education. The combination of the primary and upper primary is known as elementary education. Generally, we found, three types of schools exist in India like Government school, private schools (aided by the Govt) and private unaided schools. The various departments have been continuously supporting the elementary education like District Primary Education Programme (DPEP), State Councils of Educational Research and Training (SCERT), State Institutes of Educational Management and Training (SIEMAT), District Institutes of Education and Training (DIET), Block Resource

Centre (BRC), Cluster Resource Centre (CRC), Village Education Committee (VEC) and NGOs. In addition to that, Early Childhood Care & Education (ECCE) and Anganwadi centre have been providing support to preschool education ranging between three to six years old. Primary education is one of the basic and leading needs, and the responsibility does not lie only with the Govt, but parents and community. It brings awareness, self-advancement and reduces hereditary poverty. As per NCERT guidelines (1977), elementary education helps to acquire the tools for formal learning (literacy and numeracy), a habit of cooperative behaviours and to develop social responsibility. The first lesson in the school through elementary education teach the child to develop and inculcating those habits,

Every boy or girl should get an equal opportunity of education and state must be prepared to provide education to all irrespective of class and gender. Earlier, boys availed priority in respect of education and girls were engaged with childcare and household work. But, education policies should be effective to achieve Millennium Development Goal. In the year 2000, 189 countries made a promise to free their citizen from poverty and multiple deprivations like universal primary education, gender equality, to ensure environmental sustainability, etc. India is a signatory to this millennium mission and continuously working to achieve the millennium goals. United Nation has fixed four parameters for Primary Education: universal Literacy, Universal Primary Enrolment and Universal Primary Education completion and Gender Parity. The Govt has been taken many projects to achieve the target of MDG by 2015. The flagship programme SSA has contributed a lot to reach the goal of MDG, and it has achieved the following facts after 12 years after the introduction of SSA.

- Out of school children has been reduced to 3million in 2014.
- 1, 95,000 primary schools and more than 1,00,000 upper primary schools were established
- Girls' status in education has significantly improved, and gender parity is achieved
- More than 90 percent schools have the facility of drinking water.

Currently, India ranked 131st among 182 countries on the Human Development Index and categorised India as a medium human development category (UNDP 2016). SSA targeted to ensure all children aged between 6-14 years are receiving eight years of

elementary schooling. However, India is still facing the challenges to fulfil the goal of SSA, but the success of SSA noticed in rural northern and many parts of India where there were no schools earlier. SSA programme is playing an important role to provide primary education in India, and every time the programme has got strong support from Govt, and the programme remains a popular demand from the marginalised community which acts a key factor for Government formation.

### **3.3 History of Education in India**

#### **3.3.1 Pre British Period**

The education system which was first introduced in India is known as the Vedic system of education. The Vedic period was divided into Rig Veda, Brahmi period, Upanishad period and Sutra Period. The sources of education were Vedas and the literature of Aryabhata, Panini, Kautilya, Charak and other elements of writings. Brahmins were considered as learned pundits. Vedas occupy a significant role in Indian culture and education, and Vedas were divided into Rigveda, SamVeda, Yajurveda and Atharvaveda. The content of Veda was categorised into Janna (knowledge & wisdom), Karma (actions) and Upasana( dedication and devotion of God). The Vedas mantras are guiding principles of the inculcation of civic and social values and ethics. In this period education systems were managed and controlled by Brahmans, and most of the books were written in Sanskrit. Usually, a child got his/her first education at their home, and then formal schooling started at the ages of 8,11 and 12 with a ritual known as “Upanayana”. There were six types of major institutions found during the Vedic period. They were Gurukulas, Vedic tolls, Charan, Parishad, Charak, Parivrajakcharya and Sammelan. A child usually sent to Gurukulas by their parents at the age of five to nine years after celebrating, and this practice was compulsory for Acharya. Parishads was considered as more significant educational institutions than Gurukulas, where different teachers taught different subjects. Parishads correspondences to university education. Sammelan means getting together of different scholars on the invitation of the king where scholars were rewarded.

The Buddhist system of education influenced the Indian education system in the 5th century of B.C. Emergence of Buddhist education provided freedom to achieve education for

common people; earlier only education was confined to Brahmans only. Buddhist education system is based on three major ingredients-discipline, meditation and wisdom. Monasteries were the centre of imparting education like Gurukuls and Parishad in the Vedic period. The total period of education was 22 years, but women education was restricted due to prohibition by Lord Buddha. However, Anand Buddha admitted near about 500 women in the monasteries as a part of the Buddhist education system .Takshshila was the most renowned higher educational centre which attracted many scholars from various countries, and various courses were taught like literature, science, handicrafts and technical subjects like Greek architecture etc. With this, in the 7th B.C, Kashi became one of the prominent learning centres in northern India. Above all Nalanda which was established by King Ashoka, still carries the glory of ancient Indian education. The establishment of the public education system through Takshshila, Nalanda, Kashi, Vikramshila etc. raised the international eminence which creates a centre of attention for many foreign countries like China, Korea, Tibet etc.

During the Muslim period, Muslim rulers established different educational institutions like Maktabas, Madarsas for acquiring and learning knowledge. Maktabas was used to provide primary education, and higher education was provided in Madarsas. In Maktabas, Koran and preliminary arithmetic were taught to children and also they had to learn Arabic and Persian script. Madarsas was the centre of providing religious and secular subjects which were taught by different teachers. The elementary school was known as Maktab in the medieval Islamic period. No doubt, the contribution of Muslim period on education a lot. The Mughal kings were very interested in spreading education through Pathshalas, Maktabas and Madarasa.

The Muslim period starting from 1526 to 1848, the Persian was the court language, and only privileged class were allowed to learn the Persian language . At the beginning of 18 century A.D, Mahumad Ghazani introduced different educational institutions. Only King Akbar initiated proper steps for the extension of knowledge and education. Delhi, Agra, Jaunpur and Bidar were the major centres for education. Humayan had introduced astronomy and geography in Delhi, and later Akbar added some subjects like Accountancy, Public administration, Geometry. King Akbar established many schools and colleges in Agra to introduce the secular and scientific system of education. In the Muslim period, the pardah

system was found, but women were entitled to receive education up to a certain period, after that their education was stopped.

### **3.3.2 Education in British Period**

India experienced a colonial education system in the first half of the 19th century. The present education system is a model of the British education system which was introduced by Macaulay for the need of colonial powers. With the arrival of East India Company, Indian education system received imperialism direction. East Indian Company had to take the responsibility of Indian education due to it was related to employment in the East India Company. The mode of teaching was in English only to prepare public servants for running and supporting British rule. The East India Company Charter Act of 1813 enacted for the introduction and promotion of education by creating a fund. A lot of controversies occurred in respect of medium of instruction and Lord William Bentinck recommended that medium of instruction should be should be English and this had led to developments of missionaries schools and colleges in India. Education of women remained neglected, but under the British Rule, Bethune College was established for the formal education of women. With the introduction of “Wood’s Despatch Act 1854”, special reference was made for education and employment for education. Though 1882-87, there was no such improvement was made in girls’ education, but female education took a significant positive change at the end of British rule. British ruler initiatives towards female education are highly appreciable. However, at the same time, they tried to impart western knowledge and culture which still are carrying by ourselves. With the recommendations of Wood Despatch Committee, DPI (Department of Public Instruction), several universities and teacher training schools were established. However, general education and indigenious schools were not given, so importance, priority given on English education and imbalance in the Indian education system remained due to the preference given to foreign language schools. Lord Ripon constituted Indian Education Commission on the recommendations of Hunter Commission (1882). The commission started its journey with aims to access of primary education through vernacular medium and expansion of secondary education and also made recommendations in respect of female education, Muslim education and education of backward classes. After that, Lord Curzon constituted Indian University Commission (1902) to promote the advancement of learning. The Hartog Committee (1928-29) was formed particularly for promoting primary, secondary

and higher education in India. The committee found that progress in primary education was so far not satisfactory due to a single school teacher, unscientific teaching method, defective administration and less number of schools villages. Caste, religion and common feelings were the primary barriers to spreading primary education in India. The Hartog Committee proposed that primary education should be made compulsory and specified the duration of primary education for four years. The committee also emphasises the quality of teaching and inspection of schools for quality education. “Downwards Filtration Theory “ was taken up for providing education to common people. But the system failed due to lack of employment opportunities, and after getting education and government employment, the so-called “educated” people confined themselves in an area thinking higher than common people. This had led to sub standardise the education system. The period 1921-37 is the remarkable for a significant event in the field of primary education as compulsory education act was passed for universalisation of elementary education In the field of higher education, Calcutta University and other five universities were established for the qualitative growth of higher education.

### **3.3.3 Education during Post Independence Period**

With the independence of India, free India needs modification of education, and the process was started with the creation of University Education Commission in 1948 under the chairmanship Dr.S.Radhakrishnan. In addition to that, in strengthening the total education system in India, the Kothari Commission was constituted in 1964. All these initiatives were taken to make the Indian productivity, national unity and equal educational opportunities. .As per recommendations, primary education should be free and regional language must be given priority but at the same time, the English language should be taught. The commission had set a target to achieve literacy up to 80 per cent in the ten years time frame and also set the highest preference in girls’ education through the establishment of common schools where all children irrespective of caste, religion, a community should get the free education. With education, the inclusion of social and national service was recommended. The promotion of national consciousness, social, moral and spiritual values can be achieved by eradicating regional and linguistic barriers. However, still, young Indian remained job seekers after successful completion of college and university education.

During the budget session in the parliament, “ National policy of Education “ was adopted with the aim to prepare Indian people for the future. After that, Programme of Action (POA) was undertaken by the MHRD to fulfil the promises that specified in the National Policy of Education. NPE put the highest priority to the universalisation of elementary education in the course of universal enrolment & retention of children up to the age of 14. The policy recommended improvement about the physical structure of schools and environment. The primary focus of the policy was SC/ST and backwards educational development for equalisation and participation in the development process. NPE also proposed non-formal education for school drop outs working children who cannot be present at schools. NPE also envisaged about primary school period should consist of 5 years, and every child has to complete 5 years of schooling at the age of 11. This policy was adapted to formulate consistent education to increase education standard. To raise the educational standard, some proposal has been taken to the reorganisation of education at different stages.

### **3.4 Different Programmes of Elementary education:**

For inclusive development , education is the utmost factor for India. The national policy of Education 1986, as revised 1992 , had indicated major thrust areas in elementary education. Government must ensure that every child is provided meaningful and quality education. This has further been strengthened by 86<sup>th</sup> Amendment to the Constitution, which makes Elementary Education a fundamental right of every child. Pre school education is provided by the Government through the establishment of Anganwadi (ICDS) and ECCE (Early Childhood Care and Education). Basic education in reading, writing is provided by the primary school. Significant progress has been seen in the field of education. The 12<sup>th</sup> five year plan (2012-17) has targeted to increase the mean years of schooling to seven years along with enhancing access to higher education. The following is the different initiatives of the major educational programme taken by the Government of India.

**3.4.1 Secondary Education Commission (1952):** The recommendations of Dr S. Radhakrishnan from the University Education Commission 1948 were reinforced by the appointment of this commission in September 1952 with Dr L.S. Mudliar as Chairman. The report by this commission was submitted to the first Parliament in 1953. The commission made valuable recommendations regarding the objectives of education, reorganisation of

teaching institutions, medium of instruction and the system of examinations. The report went on to recommend the setting up of technical schools, polytechnics, strengthening multi-purpose education, central technical institutions, etc. The establishment of multi-purpose schools was a major contribution of this commission.<sup>3</sup>

**3.4.2 Kothari Commission:** This commission was constituted by the inclusion of five foreign national educationalists from United Kingdom, United States, France, Japan and Russia. The Commission recommended to conduct a detailed study on education system and integrated approach to educational development leading to a comprehensive education policy in India.<sup>4</sup>

**3.4.3 National policy on Education :** During the budget session in 1986, "National Policy on Education 1986" was adopted for elimination of disparities in the education and also improvement in the quality of education. Experts and distinguished educationalists of the Central and State Government were involved in the process and main objectives were i) Education for Women's equality ii) education of the SC, ST and other backward sections, iii) minorities' education iv) Adult and Continuing Education v) Early Childhood care and Education vi) Elementary education vii) Higher Education viii) Secondary education and Navodaya Vidyalayas, etc.<sup>5</sup>

#### **3.4.4 Restructuring & Reorganisation of Teacher Education (1987)**

It is a centrally sponsored scheme to provide adequate physical infrastructure for pre-service and in-service training of primary school teachers. Later the scheme was modified in the Xth plan, and it has decided financial sharing pattern would be 75:25. Right of children to free & compulsory education act, 2009 (RTE) was passed to make available free and compulsory education to all children of the age six to fourteen years. In RTE, specific regulatory framework and includes some provision for implementing RTE. Several factors mainly influence the RTE Act. As per section 8(f) of RTE Act, 2009 the appropriate authority shall ensure and monitor admission, attendance and completion of elementary education of each child. All the schools should have a Playground, drinking water facility, boundary wall, library, kitchen and, each school should have the provision of PTR (pupil-teacher ratio 30).

---

<sup>3</sup> [http://www.teindia.nic.in/Files/Reports/CCR/Secondary\\_Education\\_Commission\\_Report.pdf](http://www.teindia.nic.in/Files/Reports/CCR/Secondary_Education_Commission_Report.pdf)

<sup>4</sup> [http://www.teindia.nic.in/Files/Reports/CCR/KC/KC\\_V1.pdf](http://www.teindia.nic.in/Files/Reports/CCR/KC/KC_V1.pdf)

<sup>5</sup> [http://mhrd.gov.in/sites/upload\\_files/mhrd/files/upload\\_document/npe.pdf](http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/npe.pdf)

### **3.4.5 Non-formal education**

This system of education has been developed for the primarily rural people who are not able to take formal education irrespective of sex, age and educational background. The primary objectives are to provide equal opportunities in respect of education to promote national development and employment. Effective teaching can be provided through mass media to impart knowledge and skills for improving quality and standard of life. The AIR (All India Radio) performed a significant role for publicity the non-formal education. The opening of Indira Gandhi National Open University (IGNOU), other open universities had strengthened the concept of non-formal education by providing education to working people, homemakers and others who wish to acquire knowledge.

### **3.4.6 Mahila Samkhya Programme (1988)**

Under this scheme, the programme was framed in 1988 for the education and empowerment of women in rural areas especially from the economically marginalised group, to accomplish the objectives of the National Policy of Education. The various clauses are included in this programme like enhancing self-esteem, ensuring equal participation, economic independence, etc. The programme now covers 1.5 million women spreading among ten states and had enabled women to enter the public sphere and raised their voices against social issues like child marriage, caste discrimination etc. In Assam, self-defence is imparted under Mahila Samkhya Programme which encourages good participation.

### **3.4.7 Shiksha Karmi Project (1987)**

The government of Rajasthan implemented Shiksha Karmi Project in 1987 to improve formal education in the state. The primary aim to promote education in remote and backward villages where the current primary education had been distorted due to teacher absenteeism. Recruitment of local teachers with proper training had led to increasing girls enrolment, attendance and retention in primary schools by substituting irregular teacher. For this, local rural woman willing to teach is recruited to teach small groups in her neighbourhood.

### **3.4.8 Operation Black board (1987-88)**

It is aimed at minimum physical, educational facilities like the blackboard, reasonably large rooms, games material, maps, charts and other learning materials. There is a provision for minimum two teachers, one of them should be women. These arrangements were made on an emergency basis to improve the primary school education in India.

### **3.4.9 Programme of Early Childhood Care & Education**

This programme is primarily focussed on Pre School education which is aimed at children to provide nutritional support, immunisation and child care in aged group 0-6 years and also to ensure a smooth transition into formal schooling. It includes Anganwadis, creches, play schools, preschools, nursery schools, kindergartens, balwadis and home-based care. This programme is essential in the Indian context due to 60 million children live below the poverty line, and 14 per cent are not vaccinated at all.

The Ministry of Human Resource and development is responsible for these programmes. The programme of Early Childhood Care & Education in India is governed by mainly National policy of Education (1986), National Plan of Action (1992) and National Nutrition Policy (1993). The chances of achieving towards Millennium Development Goal (MDG) appears uncertain as still one-third of babies are born with underweight and has the largest number of malnutrition children. Early childhood education has been implemented on the assumption that it will magnify the programme of universalisation of elementary education.

### **3.4.10 Lok Jumbish Project(People's Movement),1992**

It is a collaborative programme by the Govt. of Rajasthan and NGOs and aimed to achieve the universalisation of elementary education through mass mobilisation. It also put more emphasis on girls' education and empowerment. Non-formal education programme like Sahaj Shiksha Kendras has been established under Lok Jumbush project. It was observed that the enrolment of girls enhanced faster than boys and reduced gender gaps.

### **3.4.11 National Programme for Education of Girls at Elementary Level (2003)**

Universalization of elementary education put special focus on girls' education to reduce gender disparity in enrolment in girls; especially among disadvantaged groups. This disparity is more acute among SC/ST. The National Programme for Education of Girls at Elementary level (NPEGEL) has been framed for providing educational support to educationally backward blocks(EBBs) and some selected urban slums. The main objective of this programme is to strengthen the capacity of national, state and district level for planning, management and evaluation of girls' education at the elementary level. The project targeted at out of school girls, drop out girls, overage girls (not completed elementary education), marginalized girls, trafficked children to achieve UEE for girls by providing quality education through various interventions and also ensuring greater participation of women in the field of education.

### **3.4.12 Kasturba Gandhi Balika Vidyalaya Scheme (2004-05)**

A project was introduced by the Govt to provide education for girls belonging to SC/ST/OBC and other minority communities below the poverty line. The mission of the scheme is to provide access and quality education by setting up residential boarding schools at the elementary level for promoting girls' education status at the upper primary stage. KGBV includes the facilities of stipend, learning of life skill development (weaving, sewing, cane craft), self-defence training, computer facility, school uniforms, medical check-up etc. Though it is a separate scheme, later it has been merged with Sarva Shiksha Abhiyan since 1st April 2007. The scheme was first introduced in 27 states including West Bengal, and it was found that significant improvement was achieved in respect of GER(Gross Enrolment Ratio) and NER (net Enrolment Ratio) and dropout rates have been lower. NGO's role is highly appreciable for the implementation of the scheme like CARE, UNFPA in Orissa, UNICEF, SANDHAN in Rajasthan, are working as a principal partner of KGBV. The Central Government fully funds the scheme and implemented by the state. The success of the scheme could be verified with the diminution of child marriage, dowry system and out of school child.

### **3.4.13 District Primary Education Programm**

The Central Government sponsored this programme and introduced in the year 1994 to revitalise the universalisation of elementary education. DPEP is funded by entirely from international grants which include the loan from World Bank and European Union, Department of International Development (UK) and UNICEF.

DPEP has adopted a holistic approach to universalise access, retention and improve achievement towards learning to reduce the disparities among the social groups by ensuring full participation of the community in the learning process. The programme also aims to provide professional support at the national, state and district level in the field of primary education. The mission of DPEP is achieved by fulfilling the strengthen the organisational planning and management through the creation of Village Education Committees, School management committees, Mother teacher Associations, Parent Teacher Association and Mother Association. The DPEP adopts” area specific approach” and is based on the principle of “ additionality” to fill the existing gaps in primary education.DPEP includes construction of new schools, introducing non-formal education, setting up various centres like Block resource centre and cluster resource centre and promoting SC/ST students through inclusive learning. The objectives of the programmes are:

- To provide all children access to primary education through either formal or non-formal stream.
- To reduce differences in enrolment, dropout rates and learning among gender.
- To increase the average achievement rate of primary schools students by 25 per cent.
- To operationalises the strategy framed by NPE for decentralised planning.

Several phases of DPEP programmes completed in several states, and it was found that the learning process had significantly improved within DPEP districts.

### **3.4.14 Education Cess and Mid Day meal Scheme (MDM):**

National Programme of Nutritional Support to primary education was introduced in 1994 for enhancing, enrolment, retention, attendance and also improving nutritional level

among the children. World's biggest launch programme has been introduced in Govt Schools, local body schools and EGS & AIE centres. At the end of 2001 by the Supreme Court's directives, which popularly known as Mid Day meal. This programme includes some positive attributes like facilitating healthy growth, social equity, bridging gender equity. To achieve the objectives as mentioned earlier, cooked mid-day meal is provided with prescribed calories. The Department of School Education and literacy and MHRD had prescribed controlling and supervising mechanism with the help from Gram Panchayats, VEC, PTAs and mother's committee. The main tasks of the committee are to monitor the regularity, hygienic and menu of the midday meal. Several research studies and projects had been undertaken and every case it was proved that MDM had made a more significant influence in universalisation in elementary education and then it has increased the enrolment and attendance and reduced the social disparity. Importance of Primary education is enriched in the Millennium Development Goal (MDG), which seeks to achieve Universal Primary Education by 2015. To heighten the universalisation of primary education, Central Govt introduced 2% as education cess on income tax and expected to generate Rs.40-50 billion per annum. The education cess is credited to Prarambhik Shisha Kosh (PSK), and the entire amount is used for education and mid-day meal. In 2015-16, Finance minister proposed to keep aside Rs.69074.76 crores for education. The budget allocation reduced by 1431 crores as compared to 2014-15 and resulted school sector education was cut down by nearly 10%. It seems that elementary education cost should be spent by the state Govt from their fund. But, the cumulative unspent amount for the year 2011-14 is Rs.32,018.23 crores about 25% of the amount available from Prarambhik Shiksha Kosh. It may be reason for the rapid decline in budget allocation for primary education

#### **3.4.15 National Common Minimum Programme (2004)**

The UPA Government launched the NCMP (National Common Minimum Programme) which is based on six guiding principles to provide social justice in India, and it includes legal justice, employment-led economic growth, women's empowerment and equality of opportunity for socially marginalised sections of the population. Social commitments towards NCPM started with an increase in public spending on education from 3 percent to 6 percent of GDP. To achieve the target, UPA Government introduced the cess on all central sales tax and a National Commission on Education is the prime agency to control

and monitor the programme. Public taxes and investments are mobilised to the education sector to bring social parity in the nation.

The Government has taken various projects in India to the universalisation of elementary education. As a result, many new schools have been opened, and it had strengthened the elementary education system by providing new classrooms, free books, uniforms and grants. SSA aims to provide quality education to reduce gender and social gaps. The importance of SSA can be felt through community participative learning. The respective state Govt has to develop their own goals and vision to the universalisation of elementary education. By notification dated 2nd January 2001, National Mission for Sarva Shiksha Abhiyan was launched in India. But, at present, SSA fails to provide quality education which leads to diminishing in the learning process in most of the schools. There has been a substantial increase in enrolment and but a student studying in those schools had not learned properly. According to Article 45 of the Constitution of India, provision has been made for free and compulsory education for all children up to the age of 14. SSA includes commission, committees, policies and norms which acts as a first formal education system for the child for the better India.

#### **3.4.16 Some initiatives of Girls Education:**

**i) Meena Manch-** The Meena Manch (Girls' club) is first introduced in South Asia including India by UNICEF during 1998, and it was first introduced in Uttar Pradesh. This forum is formed with the selected 5th to 8th std children of the schools, and they visited the homes of out of school children and convinced the parents about education. Meena team also organised Environment Day (June 5), World Day Against Child labour Practice (June 12th), Teachers Day (Sept 5 ) and other National festivals like Independence day, Republic day, Children With Special Needs Day (Dec 3) to create awareness in community on the different issues and also put efforts to bring back to schools.

**ii) Kanyashree Project (West Bengal)-** Department of Women Development and Social Welfare, Govt Of West Bengal has introduced the Kanyashree Prakalpa to support and empower 2.7 million girls aged between 13-19 years by offering an incentive in the form of cash. The main aim of this scheme is to promote secondary education among female and to

stop marriage girls before the official age of 18. With this effort by WB Govt, enrolment and retention have increased among the girl students’.

To attract more students and prevent drop out, WB Chief minister Mamta Banerjee has introduced to provide shoes to all students of classes I to IV and for this WB Govt. has sanctioned Rs.150 crore for free distribution of shoes to students.

**iii) Sabuj Sathi-**A project where all school going children in West Bengal are given bicycles of students of class X to XII. The objective of the scheme is to encourage students in higher education and to reduce drop out

**iv) Kalasi Dhar ICarrying Earthen Vessel,Orissa)-** It is an effort to monitor the attendance of teacher and children, cleanliness of the school surroundings’, regularity of classes by MTA. The designated mother is responsible for monitoring those parents whose children are found to be absent.

**v) Haryana and Bihar-** summer camps were organised for remedial teaching and on life skills for upper primary school girls which includes physical exercise and yoga.

### **3.5 Concept of Sarva Shikshya Abhiyan**

It is a flagship programme with time clear time-bound initiatives of Government of India for developing and strengthening the formal primary education system to achieve the goal of universalisation of elementary education. It is a joint venture programme of the state, Central Govt. and the local Govt to fulfil the demand for appropriate and constructive primary education for all children. The programme is based on the collaborative effort of different agencies and in includes Panchayati Raj Institutions, the school management committees, the village education committees, parents’ teachers’ associations, the mother-teacher associations.

**Figure 3.1 Logo of Sarva Shiksha Abhiyan**



According to the 86th Amendment, the right to education is a fundamental right and therefore, elementary education shall be free and compulsory. As per Article 21A, “The state shall endeavour to provide free and compulsory education to all children of the age of 6 to 14 years in such manner as the state may, by law, determine”. It involves active participation from the community to develop value-based learning for improving human potential. The mission aims at by 2017, all children in the age group 6-14 will be provided quality primary education<sup>6</sup>. The Department of school education & literacy (MHRD) under the PMO, monitors and supervise the programme.

### **3.5.1 Functions of Sarva Shiksha Abhiyan**

The main concern of this programme to provide relevant and quality education for universal access and retention, bridging of gender and social disparities in primary education and improving the quality of learning. The Sarva Shiksha Abhiyan has also acknowledged as the Education for All or ‘Each one teaches one’. The Early childhood Care & Education, Preschool learning programmes (ICDS) are the supplementary part of SSA, and these efforts were being made by the Department of Women and Child Development. The main objectives of SSA are as follows<sup>7</sup>

- All children should either be in a school or an education guarantee centre of an alternative school. Or ‘Back to School’ camp by 2003.
- All children complete five years of primary schooling by 2007, and every child should complete of elementary schooling by 2010.
- Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010.

<sup>6</sup> <http://righttoeducation.in/what-86th-amendment>, Article 45, Directive Principles of State Policy, Constitution of India.

<sup>7</sup> <http://www.educationforallindia.com/SSA1.htm>

- Universal retention both primary and elementary by 2010.
- By the year 2017, every child should complete the continuous eight years of education.

Girls' education is one of the major priorities of UEE by the Govt. of India. Sarva Shiksha Abhiyan recognises that societal norm and attitude should be changed for ensuring girls education in India. The motivation of parents and community demand for girls' education enables girls to participate in the education process, and it makes a linkage between schools, teachers and communities creating a congenial academic environment of learning.

### **3.5.2 Major Strategies to Sarva Shiksha Abhiyan**

To accomplish the objectives, positive and constructive strategies have been taken by The Government .The strategies are:

- 1. Institutional reforms:** This joint venture programme will indeed reform the education system and for this objective assessment of the common elementary education system including educational administration, achievement level in the schools, financial issues, review of state education Act, deployment and recruitment of teachers , the status of education of girls including SC/ST etc. Community Ownership and capacity building-This programme is based on active participation from different communities, like women group, VEC, Panchayati Raj Institutions, SMC, MTA, PTA, institutions like NUEPA, NCERT, DIET act directive role to the universalisation of elementary education at central, state and district level. Improvement in quality requires adequate support from these resources.
- 2. Improving main stream education-**it seeks improvement of mainstream educational administration by institutional development by adoption cost-effective methods.
- 3. Community-based monitoring with full transparency-**The Educational Management Information system (EMIS) will link school-related data with community-based information from micro-planning to survey. It is expected that each school shares all relevant and significant information with the community including grants received.
- 4. Education of girls-** The priority of the project is education girls for empowerment especially those belonging to SC/ST and other minorities.

**5. Thrust on Quality-** It lays a special thrust on making education at the elementary level useful and relevant for children by improving curriculum and effective teaching-learning procedure. While working on achieving the aim of UEE, SSA is a collaborative project which seeks help from MTA, PTA, VEC, NPGEL, KGVP etc.

**6. Education of SC/ST girls-** The principal concern of this project is to educate the girls' child especially SC/ST and other minorities. The primary focus is the inclusion and participation of all children to the elementary education system without any discrimination.

**7. Pre-project phase-** It is a well planned & defined project which operates throughout the country, and it provides for a large number of interventions for capacity development to improve the delivery and monitoring system. For this, it requires a household survey, community-based micro planning, school mapping, training for community leaders, school-level activities, support for setting up information system etc.

**8. District Elementary Education plans-** To fulfil the objectives of SSA, each district will prepare a District Elementary Education Plan which is required for a holistic and convergent approach. There will also be an annual work plan and budget which list down the activities for the year for achieving the goal of UEE. Though the goal is the same for SSA, but each district demands different approaches to achieve the universalisation in their respective circumstance and in their time frame. The year 2010 is the target for achieving all aims of SSA. Within this framework; the proposed plan will also lead to a dynamic document in the course of programme implementation.

### **3.5.3 Basic Components of SSA**

There are some basic components of this project. These are:

**a) Appointment of teacher:** The recruitment of the right teacher in this scheme is the most crucial constituent factor in the SSA implementation. As per norms, one teacher is for every 40 children in primary and upper primary. A minimum of two teachers for primary schools and one teacher for every class in upper primary schools may be appointed. If there is a need for an additional teacher to maintain the pupil-teacher ratio of 40:1, the new teacher is recruited from science/mathematics educational background. SSA also emphasise recruitment of women teachers. In some states, it was found that some schools have been operating with a

single teacher with a lower pupil-teacher ratio. In those cases, rational recruitment was made as per SSA norms. It is evident that teachers are fully aware of the mission and philosophy of the programme and it is expected that their knowledge skills are continuously up gradated to discharge their duties to achieve the objectives of SSA,

**b) Block and cluster Resource Centre-**Qualitative improvement in SSA have been made through various initiatives like training of in-service teacher, curriculum renewal, revision of textbooks, continuous evaluation of students etc. Block Resource Centre and Cluster Resource Centre were introduced in each block to execute the above initiatives. In each block consists several CRC and a small number of schools are under the CRC, and Cluster Resource Centre Coordinator heads it. Similarly, BRC is headed by Block Resource Centre Coordinator. The functions of BRC and CRC coordinators are, and it includes administrative activities (Budget preparation, data collection etc.), academic activities (field visit, training of teachers, quality monitoring etc.) and community mobilisation (promotion of community involvement, holding a meeting with VEC/SDMC). An essential function of the BRC/CRC coordinators to frequently visit the schools and confirming the effective functioning of the schools. In West Bengal significant issues were identified by them in respect to out of school children, absenteeism of the students, the absence of girls' toilet etc. District Project Coordinators had made detailed discussion with BRC/CRC in their respective districts and adopted necessary strategies to encounter the challenges faced by the BRC/CRC.

**c) Universal Enrolment:** To attain the goal of SSA, it is important to achieve the target of universal enrolment. PTR ratio and sanctioned strength of teachers are calculated on enrolment, so enrolment in elementary education system plays a significant factor for spreading UEE. Enrolment in the schools also demands regular attendance of all children including girls child as well as physically challenged groups. With all these efforts, SSA has succeeded to achieve its objectives in quantitatively. Household survey, school mapping, constitution of village education committee, Mother- Teacher Association and Parent-Teacher Association were used for universal enrolment in the school.

**d) Universal Retention:** Retention of all children in the school upto 14 years of age or up to completion of elementary education is one of the basic components of SSA. It was found that, many children enrolled in the schools but fails to complete elementary education due to variety of reasons. For this, Global Education Monitoring Report 2016, UNESCO states that

India will achieve universal primary education by 2050. So, immediately we need to ensure retention of girls and greater participation of women in SSA. With the introduction of “Zero rejection policy”, particular focus has been given to SC/ST children by opening night school and special coaching classes. For 100 % retention under SSA scheme, retention campaigns are carried out at state, district and village level. In village level, VEC conducts meetings at regular intervals and door to door survey were carried out to ensure 100% attendance and enrolment.

### 3.5.4 Organisational Structure of SSA

A separate department of Elementary Education and Literacy has been constituted for SSA. Hon’ble Prime minister will head the General Council at the National Level. The Ministry of Human Resource Development is the chairman and the Secretary, Department of Elementary Education, the Vice Chairman of the Executive Committee. For administration, a separate department has been formed named as Bureau of Elementary Education. Under the chairmanship of Chief Minister/Education Minister of the state and Union Territories, an Implementation society has been constituted. District Magistrate/ Chief Executive Officer is held responsible for District Level Implementation of SSA. The organisation set up of SSA at national, State and district have been shown as follows.

**Fig-3.2 Organisational Structure at National Level**



Soucre: <http://gujarat-education.gov.in/ssa>

Members of the governing council include Finance Ministers(GOI), Deputy Chairman (Planning Commission), political leaders, MPs, Education Ministers of State, representatives of teachers, NGOs, Director(NIEPA), Director(NCERT), Chairman (NCTE), Joint Secretary Elementary Education Member society. In executive council ,members include ,Director(NCERT), Director(NIEPA) ,Chairman(NCTE), Principal, Advisor r(Education),teachers, NGOs representatives. The organisational chart for the State level showing the functions from the state mission to school level for implementation of SSA.

A registered society named as “ Paschim Bangla Rajya Prathamik Siksha Unnayan Sansita” was constituted as an autonomous body for implementation elementary education in Bengal. Later, the mission of SSA was entrusted to that autonomous body on 14.03.2002 with the new name “Paschim Banga Rajya Praramvik Siksha Unnayan Sanstha”.The name was changed to “Paschim Banga Sarva Shiksha Mission”, and it is controlled by General Council (GC) and the Executive Council (EC). The General Council is headed by the Chairman (Chief Minister) and Vice Chairman (School Education Department). The EC which manage the activities of the society is headed by the Chief Secretary to the State Government.The State Project Office plays an important role here and acts as a liaison among District, sub-district, NGO, State Government and National Bureau. The state project officer has to report the State Project Director (SPD), and District Magistrate occupies the position of State Project Director, and Zilla Sabhadipati heads DM. At the sub-district level, Cluster Resource Centre is established, and CRC provides academic support to nearby schools.CRC is headed by cluster resource coordinator who is the head teacher of primary schools. To manage the SSA programme effectively at the district level, it requires an appropriate structure for proper implementation. The management structure at the district level is as follows:



Source-<https://darp.gov.in/>

The composition of different committees at different are show below

**Table 3.1 Management Structure at District Level**

<b>Name of the Committee</b>	<b>Administrative Head</b>	<b>Constituents of the Committee</b>
District Level Committee	District Education Officer in the role of District Project Coordinator	Local / Public Representatives (numbers as prescribed by State Government / UT)
Local Authority	Local Administrative apparatus	Elected Local Body (Municipal Body / Panchayats) as prescribed by the respective State Government
School Management Committee	Head Master	75 percent of the members would be parents or guardians of children
		25 percent members would be
		1/3rd Members would be of elected by local representatives
		1/3rd would be school teachers

Source-<https://darpg.gov.in/>

### **3.6 Perception of SSA in Rural & Urban Area:**

The general perception is that education scenario of rural areas are relatively lower compared to urban areas and rural people spend less in the education of their child on the assumption that parents cannot realise the benefit of education. There is also exist earning differentials among the rural and urban area households.

Indian economy is dependent on the rural economy as near about 70 per cent of the country's population lives in rural area. In order to ensure overall development in India, progress and advancement should be made throughout the country, and equal importance must be put on rural and urban development to reduce the regional disparities. Rural sector means having the density of population less than 400 per sq Km and minimum 75 percent of the male working population is engaged in agricultural activities. As per Census 2011, 68.84 per cent of the total population of India lives in rural area, and West Bengal contributes 7.5 percent share to its rural population. The golden quotation by Mahatma Gandhi "India lives in villages" is still true as almost 70 percent of India continues to live in villages. The World Bank data reported that 50 percent of the overall labour force is dependent on agriculture. So the development of India needs development of the rural area in respect of literacy, health, nutrition, safe and healthy environment and equality of income. Socio-Economic Census

(2011) estimated that almost 75 percent of the rural households live with a monthly income less than Rs.5000.No doubt, only quality education in rural India can control poverty and unemployment and able to reduce discrimination.

A brief comparison was shown below between rural and urban area in respect to population and literacy,

**Table 3.2 Comparison of Rural and Urban Population and literacy**

<b>Particulars</b>	<b>India</b>	<b>Rural</b>	<b>Urban</b>
Population (2000) in crore	102.9	74.3	28.6
Population (2011) in crore	121	83.3	37.7
Growth Rate (2000) in %	21.5	18.1	31.5
Growth Rate (2010) In %	17.6	12.2	31.8
Sex Ratio (0-6 Years) 2000	927	934	906
Sex Ratio (0-6 Years) 2010	914	919	902
literacy (2000) in %	64.8	58.7	79.9
Literacy(2010) in %	74	68.9	85
Literacy Male rate (2000) in %	75.3	70.7	86.3
Literacy Male rate (2010) in %	82.1	78.6	89.7
Literacy Female Rate (2000) in %	53.7	46.1	72.9
Literacy Female Rate (2010) in %	65.6	58.8	79.9

Source: 2011 census GOI

From the above table 3.2, it was found that the proportion of rural population substantially increased in compared to 2001, but the slowing down of the overall growth rate of population is due to sharp decline in the growth rate in rural areas. The gap between rural and urban India education has declined. As per census data 2011, 26.46 percent of the total urban population was attending the classes compared to 25.76 percent in rural (non-urban) areas. However, still, in the further stage of education, it was found that nearly 4.5 percent of males and 2.2 percent of females able to complete graduation in rural areas while 17 percent of males and 13 percent of females completed graduation level in urban areas. The literacy rate was 75 percent in rural areas in compared to 86 percent in urban areas for the child age group above seven years. As per survey on: “Social Consumption: Education” during National

Sample Survey (NSS) 71st round, January to June 2014 conducted by National Samples Survey Office (NSSO), Ministry of Statistics and Implementation. Some key indicators of social consumption in India as follows:

- i) The adult literacy rate in rural areas (64 percent) was lower than in urban areas (84 percent)
- ii) No Significant difference was found between rural and urban schools in respect of distance for physical access to primary schooling.
- iii) In both the areas (rural and urban) near about 1% of the total population in the age group, 5-29 got enrolled in the schools but never attended the educational institutions.
- iv) Gross Attended ratio for the level primary was nearly 100 percent in rural and urban areas (male and females)
- v) The net attended ratio was 84 percent for male and 83 percent for female children in the age group 6-10.
- vi) There was no discrimination between rural-urban, and male-female disparity at all India level up to the elementary level in net attended ratio.
- vii) In rural areas majority near about 72 percent of the students at the primary level was studying at Government Institutions whereas, in urban areas, only 31 percent of the students at primary level were studying at Government Institutions.
- viii) In rural areas 11 percent and in urban areas 6 percent of the students never enrolled in any educational institutions of the age group 5-29 years
- ix) The dropout rate 33 percent in rural areas and 38 percent in urban areas in the age group 5-29 years

From the above facts and figures from NSS, it was found that the Indian Government have adopted an effective policy to increase literacy rates as well as improving access & quality at all levels of education. But, improving the standard and quality of education is the critical issues for the Government. Dreze and Sen argued that half of the adult population were unable to read and write as per 1991 census. As per ASER 2014, 96.7 percent of children in the age group, 0-6 are enrolled in rural school and average attendance 71 percent. The

children enrolled in Govt schools studying at class V, showing a decline in reading levels between 2010 and 2014 and on an average 40 percent of enrolled students' of class V can read the Std II level text in the rural area. So, without being able to read and write, a proper education cannot be effective. A large number of students in the rural area do not know the numbers 1 to 9. so the motto of SSA should be the education for all as well as learning well in the school.

For promoting the importance of education in India, several projects have been undertaken. But still, rural schools suffer from some basic facilities like infrastructure, job satisfaction of the teachers, transportation problems, lack of co-curricular activities, deficiency of funds, and lack of awareness of parents. Most often students got admitted in the schools, but their performance in unit test and examination could not be comprehensible by their parents due to illiteracy among them.

But schools in the urban area have the facility of accessible transportation, provision of basic facilities. The teachers in the urban area are motivated about their work due to the congenial environment in school in respect to civil works and other facilities, and also they are satisfied with their income as maximum male teachers are engaged in part-time jobs.. The rural and urban area differentiations in respect of literacy are also discussed with the help of secondary data. From this chapter, the researcher selected SSA scheme and studied some research work which provides a significant reason to do the present study.

# Chapter IV

## **Methodology**

## Chapter IV

### Methodology

#### 4.1 Introduction

This Chapter is the backbone to the research paper and gives an overall view of the research methodology behind the research. Research methodology is a systematic way to solve a problem, and it is a science of studying how research is to be carried out. It is also defined as the study of the methods by which knowledge is gained and its aim to give the work plan of research (S. Rajasekar, P. Philominathan, 2013). In order to achieve research objectives a survey was conducted in Sarva Shiksha mission, Jalpaiguri Educational District which includes the rural areas of Jalpaiguri district as well as entire area under Jalpaiguri Municipality. The sampling framework, methods of data collection and tools used for analysis are discussed in this chapter. The study was undertaken in the context of Midday meal and civil works in the Jalpaiguri municipality (urban) and Rajganj block (rural)

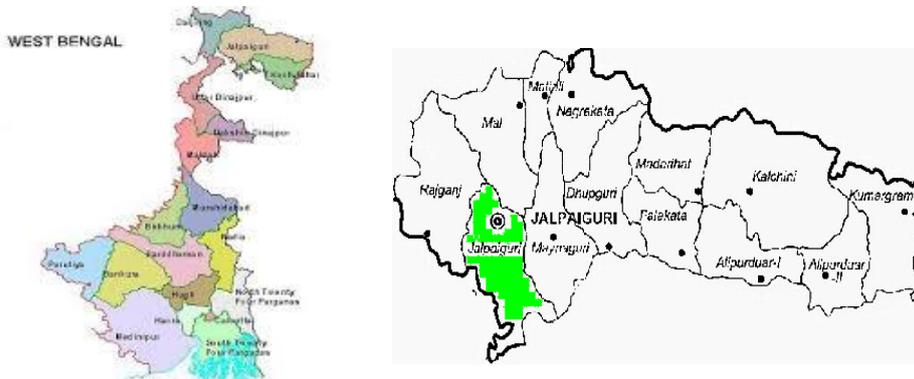
#### 4.2 Sampling Unit

The district Jalpaiguri in the state of West Bengal, India is considered for the present study, and it is the largest district of North Bengal. The district has two subdivisions; Jalpaiguri Sadar, and Malbazar. The district is surrounded by international borders with Bhutan and Bangladesh in the north and south respectively and district borders with Darjeeling hills in the west and northwest and Alipurduar district CoochBehar district on the east. The total area of Jalpaiguri district is 3044 sq km. According to 2011 census, this district has a population of 3,869,675 and population density of 622/km.<sup>8</sup>

	2005-06	2013-14
Primary schools	West Bengal	76969
	Rural	65692
	% of school in rural area	85.34
	Jalpaiguri	3849
	Rural	3511
	% of school in rural area	91.21

<sup>8</sup> <https://www.mapsofindia.com/maps/westbengal/districts/jalpaiguri.htm>

Figure -4.1 Geographical Map of Jalpaiguri



The Following units of jalpaiguri Municipality(Urban) and Rajganj Block had constituted sampling units

- Jalpaiguri Municipality 12 Municipality Wards ( 1,5,8,10,11,12,,14,15,16,17,18,20,)
- Rajganj Block :Five Villages are selected (Panikauri,Sukhani, Mantadari, Shikarpur and Balaigach)

#### 4.3 Criteria for selection

Jalpaiguri district consist of seven subdivision -Jalpaiguri Sadar, Malbazar, Dhupguri ,Rajgan, Mayanaguri , Metali Nagrakata. There are as many 3849 primary schools, including both Government Schools (3157) and Private schools (692). The midday meal is operating in most of the Government Schools only. In Jalpaiguri Sadar 40 schools have been selected out of 305 schools .Rajganj rural consists of 12 villages, out of the five villages were selected randomly in the first stage namely Panikauri, Sukhani, Mantadari, Shikarpur and Balaigach . All the selected villages are having a literacy rate between 65 percent to 70 percent . The survey covered five villages in Rajganj Block. At the second stage, eight primary schools were randomly selected from each village. From each school, five children were randomly selected studying in class I to V. Headmaster and two teacher from each school was also interviewed.

For the study in Jalpaiguri Municipality,there are 26 municipality wards Out of these, twelve municipality wards were taken for study, in the first stage..Out of this, twelve municipalities,

3 to 4 schools were selected randomly in the second stage. There was a total 180 student sample from 40 schools, 3-4 students from each school were selected studying in class I to V. In addition to that, 40 head teachers along with two assistant teachers were selected.

Thus 180 students, 40 head teachers, 80 assistant teachers from Rajganj Block and 180 students, 40 head teachers, 80 assistant teachers from Jalpaiguri municipality were selected for the study. Thus, 360 students, 160 assistant teachers and 80 head teachers were the total samples for the study. 80 parents were interviewed from each sample. Altogether 760 respondents were interviewed for the study. From the data collected from different schools through questionnaire from students, headmaster and parents, the detail analysis in respect of each category has been discussed below.

**Table 4.2 Details of Sample wards and Villages**

Block	Name of sampling Unit	Total population	Male	Female	Child population of Total population (0-8 Yeras)	literacy Rate	Average literacy Rate
Rajganj	Panikauri	6613	3386	3227	13.34	62.75	India 74.04 West Bengal 76.20 Jalpaiguri 82.39
	Sukhani	35276	18153	17123	12.65	75.24	
	Mantadari	5362	2728	2634	14.3	67.33	
	Shikarpur	19437	9969	9468	11.87	68.6	
	Balaigach	1383	713	670	12.22	75.83	
	<b>Average</b>	<b>13614.20</b>	<b>6989.80</b>	<b>6624.40</b>	<b>12.88</b>	<b>69.95</b>	
Jalpaiguri Municipality	Ward No 1	6705	3782	2923	8	87	
	Ward No-5	3451	1684	1767	6	96	
	Ward no-8	3601	1733	1868	7	93	
	ward no-10	4578	2179	2399	6	96	
	ward No-11	5625	2807	2818	7	96	
	Ward No-12	4247	2079	2168	10	85	
	Ward No-14	4827	2441	2386	7	94	
	Ward No-15	3081	1497	1584	7	95	
	Ward No-17	3617	1747	1870	7	94	
	Ward No-16	3451	1684	1767	7	96	
	Ward No-18	3179	1521	1658	6	98	
Ward No-20	4094	2067	2027	7	96		
	<b>Average</b>	<b>4204.67</b>	<b>2101.75</b>	<b>2102.92</b>	<b>7.08</b>	<b>93.83</b>	

Source - 2011 census

While selecting the sample area from the state, the selecting criteria were literacy rate as the considering parameter. The present literacy rate of Jalpaiguri 82.39% which is higher than west Bengal average rate as well as the national average. Ward No 18 and 20 are the most literate ward in the municipality, with literacy rate 98%, followed by ward No. 16, 5, 10, 11

(96 percent), ward no.4 (95 percent), ward no 5,14 (94 percent) and ward no 1 (87 percent) and all these wards have more than 85% of the total population are literate. On the other hand, Sukhani has a literate population 62.75 and Panikauri at the bottom with only 62.75 percent. Mantadari, Shikarpur and Balaigach are also in this category with 60-70 percent literate population, which is below than State and as well as Nation average. So these units have been taken as a sample to access the impact of MDM in SSA and also to make a review of infrastructure facilities on improving the attendance, enrolment

#### 4.4 Sampling Size and Sampling Techniques

##### 4.4.1 Selection of Schools

For the study, only primary schools have been covered under the survey, and For research, proportionate stratified random sampling was used. The school with a minimum of 50 students and 2 teachers were selected. All the Govt schools and Govt. Aided schools in these districts were covered under the study. The sample consists of 10% of total population (in the age 6-14

**Table 4.3 Details about Sample schools surveyed**

Block	Village/Area	Number of Primary schools surveyed	total number of schools surveyed	All total number of schools surveyed
Rajganj	Panikauri	8	40	80
	Sukhani	8		
	Mantadari	8		
	Shikarpur	8		
	Balaigach	8		
Jalpaiguri Municipality	Ward No 1	3	40	
	Ward No-5	3		
	Ward no-8	3		
	ward no-10	4		
	ward No-11	3		
	Ward No-12	4		
	Ward No-14	3		
	Ward No-15	3		
	Ward No-17	3		
	Ward No-16	3		
	Ward No-18	4		
	Ward No-20	4		

#### 4.4.2 Selection of students

From Jalpaiguri Municipality and Rajganj Block 5 to 3 students were selected from each school. A total of 360 (180 from Rajganj and 180 from Jalpaiguri) primary school children were surveyed from 80 schools (40 from Rajganj and 40 from Jalpaiguri) that are availing the benefit of MDM and school infrastructure facilities.

**Table 4.4 Details about selected primary schools, boys and girls in sample areas**

Block	Village/Area	Number of Primry schools surveyed	total number of students surveyed from each school	Gender		Class		All total number of students surveyed
				BOYS	GIRLS	Class 1 to 3	Class 4 to 5	
Rajganj (Rural)	Panikauri	8	40	90	90	120	60	180
	Sukhani	8	40					
	Mantadari	8	40					
	Shikarpur	8	40					
	Balaigach	8	20					
Jalpaiguri Municipality (Urban)	Ward No 1	3	15	90	90	110	70	180
	Ward No-5	3	15					
	Ward no-8	3	15					
	ward no-10	4	15					
	ward No-11	3	15					
	Ward No-12	4	15					
	Ward No-14	3	15					
	Ward No-15	3	15					
	Ward No-17	3	15					
	Ward No-16	3	15					
	Ward No-18	4	15					
	Ward No-20	4	15					

#### 4.4.3 Selection of parents of students

Parents of students were interviewed to study their observation regarding the acceptance and impact of mid day meal. In total 160 parents were interviewed for the research purpose on the basis of their family income.

**Table 4.5 Details about selected parents**

Block	Village/Area	Gender		All total number of parents surveyed
		Male	Female	
Rajganj (Rural)	Panikauri	12	5	17
	Sukhani	8	5	13
	Mantadari	9	5	14
	Shikarpur	8	5	13
	Balaigach	17	6	23
	<b>Total</b>	<b>54</b>	<b>26</b>	<b>80</b>
Jalpaiguri Municipality (Urban)	Ward No 1	2	7	9
	Ward No-5	3	5	8
	Ward no-8	2	5	7
	ward no-10	3	3	6
	ward No-11	2	4	6
	Ward No-12	2	4	6
	Ward No-14	2	5	7
	Ward No-15	2	2	4
	Ward No-17	2	3	5
	Ward No-16	2	5	7
	Ward No-18	3	5	8
	Ward No-20	2	5	7
	<b>Total</b>	<b>27</b>	<b>53</b>	<b>80</b>

**4.4.4 Selection of teachers of students**

Teachers of beneficiary students were selected for interview to study the impact of MDM in their attendance, enrolment, retention. In total 80 teachers were selected. (i.e. two teacher from each school).40 head teachers from Jalpaiguri and Rajganj block were selected for the study respectively.

**4.5 Pilot Study**

Questionnaire construction is an essential step for the research procedure. Before using the questionnaire for substantive research, it is essential to obtain information by pilot testing the questionnaire on a person similar to those who will be asked to complete it as a part of the

substantive research (Donald P. Schwab 1999). Pilot testing helps to identify the errors in assumptions and also identify the items which are difficult to understand. Pilot testing will lead to change the research questionnaire. It will be helpful in increasing response rate, reducing missing data and obtaining a more valid response.

A pilot study was carried out on 15 students, three teachers and three parents each from Jalpaiguri municipality and Rajganj block using Cronbach's alpha. Cronbach's alpha is used to measure the internal consistency of a test. Alpha is an essential concept of evaluation of assessment and questionnaire. Alpha accepted values ranging from 0.70 to .095 (J.Bland and D.Altman,1997). A maximum alpha value 0.90 has been recommended(D.Streiner,2003). The reliability was calculated with Cronbach's Alpha was found to be 86.1%. These values are highly positive and indicated good internal consistency.

The result of the pilot study was not included in the actual study.

#### **4.6 Collection of data**

Primary data has been collected from different schools belonged to Jalpaiguri Municipality and Rajgunj Block for achieving research objectives. The investigator visited the different schools personally after taking permission from DPSC Chairman in writing. Subsequently, after obtaining permission from the head teacher, the researcher discussed in details about the quarries and collected the necessary data from students and teachers about the nature and purpose of the study. The researcher had also adopted a different method to attract the children in an interview by proving gift items to them. The collection of data has been completed with the help of pre-designed and self-constructed questionnaires from head teachers, teachers, students and parents. The survey was conducted in Jalpaiguri and Rajganj block from November 2014 to April 2015 and the reference period of the study was from 2013 to 2018. The interview scheduled has covered the information about mid-day meal programme, family income, attendance, ill effects/health problems , enrolment, drop out, Participation in mid-day meal, hygiene factors in MDM, infrastructure and institutional arrangements under the SSA. Though the proforma was in English, it was clearly explained to the students by the researcher.

The secondary data has already been collected from different websites, references books, journal, newspapers, magazines Govt. Reports and publications, working papers and Reports from PBSSM (Paschim Banga Sarva Siksha mission)

#### **4.6.1 Questionnaire for students**

Data has been collected through questionnaire from the students of Jalpaiguri Municipality (Rural) and Rajganj (Rural) to judge the perception of mid day meal in respect quality, quantity ,regularity and hygiene of mid day meal as well as infrastructure facilities in the school,

#### **4.6.2 Questionnaire for parents**

Data has been collected through questionnaire from the parents of students of Jalpaiguri Municipality (Rural) and Rajganj (Rural) to judge the perception of mid day meal.

#### **4.6.3 Questionnaire for teachers**

Data has been collected through questionnaire from the teachers of schools from Jalpaiguri Municipality (Rural) and Rajganj (Rural) to judge the effectiveness of SSA in respect of effectiveness of MDM, attendance, enrolment, drop out, improvement in a study, infrastructure facilities and other arrangements of the SSA. The questionnaire includes.

- i) The basic information about the school
- ii) Questions that reflect the effectiveness of MDM. Different questions have been included to check the impact of MDM on students in respect of attendance, drop out, improvement in the study.
- iii) The questions that include infrastructure facilities in the schools in respect of the number of classrooms, drinking water, playground, condition of the classroom, medical check-up,etc.

#### **4.7 Hypothesis Formulation**

Hypothesis is defined as a testable statement about empirical relationship between an independent and a dependent variable (Pollock,2009).In other words, hypothesis is an assumption or proposition whose testability is to tested on the basis of compatibility of its

implication with empirical evidence with previous knowledge(Mouly,1963). A hypothesis has greater significance in the research process by explaining the cause-effect relationship and provides a basis for reporting and conclusion. After considering research objectives, the respondents with a different sample are were taken, and hypotheses were designed and formulated from students, teachers and parents. The study was conducted to test the following hypotheses

1. Family income and mid day meal satisfaction are independent in Jalpaiguri Municipality and Rajganj Block, in response to parents.
2. There is no significant association between quantity of MDM and health problem of the children in Jalpaiguri municipality and Rajganj block in response to parents.
3. There is no significant association between MDM satisfaction and attendance in Jalpaiguri municipality and Rajganj block in response to students.
4. There is no significant association between quantity of MDM and health problem of the children in Jalpaiguri municipality and Rajganj block in response to students.
5. Quality of MDM has no significant impact on the overall satisfaction of MDM in response to parents in Jalpaiguri.
6. There is no significant association between location of the school (rural and urban) and an increase in enrolment, reduction in drop out, increase in school attendance, increase in study behaviour, quantity of MDM served, increase in girl's enrolment, quality of MDM & sufficiency of educational and nutritional effect which has an overall impact on SSA, in response of teachers.
7. There is no significant difference for improvement in enrolment, reduction in drop out, improvement in school attendance, improvement in study behaviour, increase in girl's enrolment & sufficiency and nutritional impact after implementation of MDM scheme between Jalpaiguri Municipality(Urban) and Rajganj(Rural).
8. Students of Jalpaiguri Municipality are not satisfied with mid-day meal concerning the taste of the food, not feeling full stomach, timely delivery and the empty stomach.

9. Students of Rajganj block are not satisfied with mid-day meal concerning the taste of the food, not feeling full stomach, timely delivery and an empty stomach.

10. Students of Jalpaiguri municipality who are satisfied with the hygiene of MDM are not influenced by cleanness of dining area, drinking water facilities, illness/health problems, provision of washing hands with soap and cleanness of kitchen store.

11. Students of Rajganj block who are satisfied with the hygiene of MDM are not influenced by cleanness of dining area, drinking water facilities, illness/health problems, provision of washing hands with soap and cleanness of kitchen store

12. There is no relationship between the gender and attendance in schools at Jalpaiguri Municipality and Rajganj block.

13. There is no significant relationship between attendance and the condition of the classroom in Jalpaiguri Municipality and Rajganj block

#### 4.8 Data Analysis Techniques

The statistical tools that are used for the analysis of primary data are discussed below:

- Simple percentage method
- Graphical method
- Cross tabulation
- Chi Square Analysis
- Multiple Regression Analysis.
- T taste

i) **Simple percentage Method**-To compare between two or more variables from collected data, simple percentage is used.

Percentage=number of response×100÷ Total number of response.

ii) **Graphical Method**- After collection of all primary data, data are organised, explained and displayed by using different graphical techniques. Graphical techniques include bar charts, histograms and pie charts

**iii) Cross Tabulation-** A Cross-tabulation (cross) tab is a quantitative research technique for analysing the relationship between two or more variables or groups. It compares results for one or more groups with the results of another. By comparing the variables in this frequency distribution the researcher can study whether an association exist between two attributes or not.

This can be explained by taking two variables gender(g)and any type of menu preferred in a school (m). The values for gender male (mg) and female (fg).The values for m (menu) are yes-prefer mid day meal, and no-do does not prefer mid-day meal in the school. Thus we are going to see if there is a relationship between gender and the mid-day meal menu in the school. In order to do that, segregation is required between the dependent and independent variable. As here, gender influences the preferences of the menu, gender is treated as the independent variable and preference of the menu would be the dependent variable. To confirm the validity of the result, the result can be examined by the Pearson Chi-Square test. For example, if the significance level ( $\alpha$ ) 0.00023, the confidence level  $1-0.00023=.99977$  or 99.97 per cent confident which is good. If we want to check the degree of relationship between two variables, Cramer’s V and contingency co-coefficient are the tools that explain whether strong or weak relationship between them.

**iv) Chi Square Analysis-** The researcher found that the chi-square test is a quantitative measure used to determine the relationship between two categorical variables. Chi-square ( $\chi^2$ ) test used to determine whether the relationship exists between two random variables. The purpose of hypothesis testing is to determine the relationship or condition. It is also useful to determine the association between two random variables (i.e. expected frequencies and observed frequencies) in respect of dependence (dependent or independent). As it is a non-parametric test, it shows the dependency to assess the significance level between two attributes and LIKERT scale variables

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

O=observed frequency in each category

E= Expected frequency in the corresponding category

df is the “ degree of freedom” (n-1)

$$\text{Expected frequency (E}^{\text{th}}) = \frac{\text{Sum of the rows} \times \text{sum of the column}}{\text{Total observations}}$$

In chi square degree of freedom can be calculated as  $df = (C - 1) \times (r - 1)$

C= number of column in the table

R= number of rows in the table

**v) Multiple Regression Analysis-** In regression analysis, we are interested in predicting or estimating the linear relationship between two or more variables. Regression analysis clearly indicates the cause and effect relationship. The variable identified as the cause is taken as the independent variable and the variable constituting the effect is taken as the dependent variable. It establishes a functional relationship which is mathematical, showing the dependence of one variable on the other(s). It clearly indicates which one is the dependent variable and which one is the independent variable. The regression coefficient are not symmetric in x and y  $b_{yx} \neq b_{xy}$

Regression equation  $\hat{y}_i$ .  $\hat{Y}$  represents the estimated or the predicted values of y when we put  $x=x_i$  in this equation. If we have n pairs of given observation  $(x_i, y_i)$  for  $i=1,2,3,\dots,n$ . In the regression equation a= constant and b is the slope of the regression line. For example relationship between the effective life of the cars (in years) and monthly car insurance premium, where the life of the car is the independent variable and premium is the dependent variable. Multiple regression predicts how multiple independent variables are related to a dependent variable. Multiple regression equation is

For example, the height of the student depends on mother's height, father's height, male or female etc. The beta co-efficient (b) explains how strongly is the independent variable related with the dependent variable. The value R shows the relationship between the observed and predicted values of the dependent variable. The value of R ranges between -1 to +1. The (+) or (-) sign indicated the direction of the relationship.  $R^2$  is the proportion of variation in the dependent variable explained by the regression model, and its value ranges between +1 to -1. A higher value indicates that the model fits the data well. Besides R squared, ANOVA (Analysis of variance) can be used to check how well the model fits the data.

**vi) Correlation** In this study Karl Pearson Correlation Analysis was used

a) To study whether there was significant correlation between different variables attendance in Jalpaiguri municipality

b) To study whether there was significant correlation between different variables attendance in Rajganj

**vii) T taste-**Independent sample t taste is used to compare means of different two groups where groups are not dependent on each other. The results of t test indicates whether the difference between two means are larger than expected by chance (Dr.Gabriel,2009).

Chapter V

**Mid Day Meal in Jalpaiguri**

**Municipality**

**&**

**Rajganj Block**

## Chapter V

### Mid Day Meal in Jalpaiguri Municipality & Rajganj Block

#### 5.1 Introduction

Discrimination in social and economic progress in any civilised society could be cracked by education. Education helps to develop functional & analytical ability for individuals'. Involvement in education does not only increase efficiency, it also helps to lead quality and societal, individual life. Elementary education is the base of our education system. During this elementary period, students are encouraged to think independently and to develop basic values of social life. To achieve this, Government of India made a constitutional right to provide free and compulsory education to all children until the age of 14 in the year 1950. This policy was strengthened by the direct involvement of the Central Govt. through Sarva Shiksha Abhiyan (SSA) in the year 2001. The Midday Meal scheme is one of the major strategies to strengthen. In a nation-building process, education plays a pivotal role and it is the first and foremost duty of the Govt. to provide education with food security. Poverty is an external determinate which relate to economic and social deprivations. Social deprivation is solely depended on lower income, insecurity and discrimination in society. Due to these above factors, children from lower income group are not able to enrol themselves in the schools. Poverty remains a great challenge to India, and poor lifestyle, malnutrition, food insecurity and lower rank in HRD are the outcomes of poverty. Approximately, 19.8 million children below age 6 are undernourished (ICDS 2015) and only 9.6 percent of children between 6-23 months in India receive adequate diet (NFHS 4, 2015-16). Out of total children in India, 36 percent of children under 5 years age are underweight in the country. Apart from this, only 32 percent of children finish their school education, and only 2 percent of the schools offer complete school education from class 1 to class 12 (DISE 2014-15). Children are the most valuable asset to the nation, as the nation gets economic benefits from their future activities. According to census India (2011), the total population of India is about 1.2 billion and out of 31.1 percent of the group falls between the age group 0-14 years. The factors as mentioned earlier directly linked with the poverty. Government Of India has been taken several projects for improving literacy rate. The MDM programme was launched to provide full plate launch to hunger child who cannot concentrate their studies with an empty

stomach. This programme was introduced to overcome hunger of the child, especially who belongs to the poor socio-economic background. Govt. Of India is continuing to attract the children to school by providing food security to the children. It was also observed that parents are also sending their children to the schools as it fulfilled the basic needs of hunger and education simultaneously. The world's biggest school launch programme, MDM promises to provide daily nutrient requirement in the form of cooked meal in the school premises, However, there are many countries who introduced school meal programme according to their needs like the United Kingdom (1945), United States of America (1946), Japan (1947), China(1964), Thailand(1970), Indonesia(1967), Korea (1973).

Midday meal programme is a public welfare programme, and it was first introduced in the Madras Corporation area in the year 1925. The Madras Corporation started distributing cooked mid-day meal Apart from Madras; several other cities initiated the programme of MDM. Keshav Academy of Calcutta introduced tiffin in the form of MDM for school children against payment basis in 1928. Later, this programme was extended in various parts of the country like Kerala (1941) and Mumbai (1942), Bangalore(1946), Uttar Pradesh (1953). With the help from UNICEF, skimmed milk powder was provided to the children in the age group 6-13 in Mumbai. In Bangalore, cooked rice with curd and in Uttar Pradesh, boiled or roasted grams, ground-nut, puffed rice or seasonal fruits were provided to school children on a voluntary basis. International agencies like the UNICEF, FAO, WHO assisted the several states in India to provide launch programme during 1950. Later, Applied Nutrition Programme (ANP) was developed by Govt. of India for feeding the school children with nutrition value. Other international agencies, like Catholic Relief Service (CRS), Co-operative of American Relief Everywhere (CARE) also assisted the programme by providing nutritional foods. All these efforts were taken by the Govt to prevent and protect the child from hunger and malnutrition. Later, all the above-discussed launch programme was included in the MDM of Govt. of India and received full attention in 1995 and merged with SSA in all over the country with an aim to maximise enrolments and minimising drop out in the age group 6-11.

## **5.2 MDMs & Introduction in India**

Food is one of the basic needs and sharing or offering food is a universal tradition by all the communities in the world. India also experienced a long tradition in respect for food. In 1950,

India adopted a progressive constitutional, and it aimed to ensure economic, social and political justice with equality and dignity. Indian Constitution does not recognise “ The Right to Food” as a fundamental right. However, Article 21 of the India constitution guarantees a fundamental right to life and personal liberty. The right to get quality food is necessary for human life and one of the fundamentals duty of the Govt. to arrange adequate means to livelihood. Article 47 spells out the responsibility of the state concerning nutritional support and standard livelihood. Article 32 of the Constitution Right to Food has become a guaranteed fundamental right, and therefore the State must ensure the provision of availability of food to every household, particularly for the poor household. Now, ‘ right to education’ and ‘right to food’ are the fundamentals rights of every Indian citizen. After independence, India adopted various strategies to improve the nutritional status of the children. So, for the development of the nutritional status, Integrated Child Development Service (ICDS) was introduced in 1975 in 33 blocks and aimed to provide holistic development of children (0-6 years) in the form of supplementary nutrition, immunisation, health check-up and health education. The primary objectives of ICDS are :

- 1) To improve the nutritional and health status of the children (0-6 years),
- 2) To develop the foundation of proper psychological, physical and social development of a child.
- 3) To reduce mortality, malnutrition and school dropout.
- 4) To achieve effective coordination of policy and implementation amongst the various departments to promote child development,
- 5) To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.<sup>9</sup>

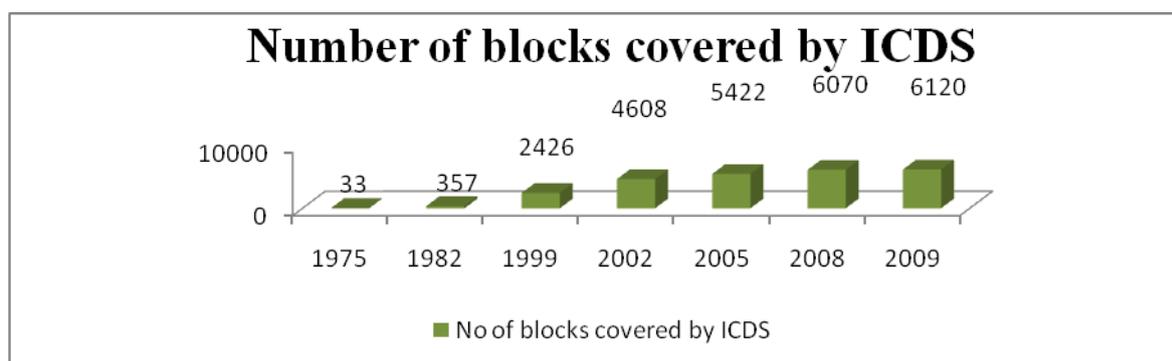
The above objectives are provided through the network of Anganwadis in the form of supplementary nutrition(SNP), Non-formal pre-school education (PSE), immunisation, health check-up, nutrition and health education (NHE). By fulfilling the above objectives, the ICDS is expected to attain the goal of the Millennium Development Goal.

---

<sup>9</sup> Anganwadi Feeding (<https://www.akshayapatra.org/anganwadi-feeding>)

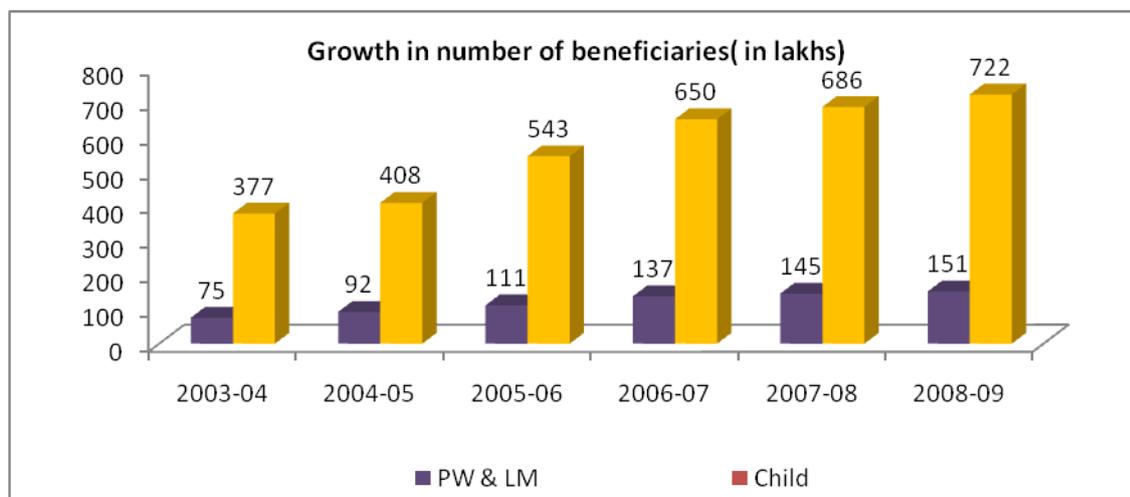
The aim of ICDS to do welfare of children and for expected mothers by providing cooked foods and morning breakfast. The involvement of NGO manages this process. The Govt. Of India prescribes the nutritional norm as 500 calories and 12-15 grams of protein of children in the age 0-6,600 calories and 18-20 grams of protein to pregnant and nursing mothers and 800 calories and 20-25 grams of protein to malnourished children. The supplementary nutrition was provided @ Rs.5 per child, Rs.5.50 per pregnant & nursing mother & Rs.6 per mal-nourished child per day till 30.06.2013. However, considering the price escalation, GOI revised cost norms Rs.6 per child per day, Rs.7 per pregnant mother per day and Rs.9 per malnourished child per day. Though the ICDS programme was introduced in 1975 among 33 community development blocks, it has multiplied in through the country. Chart 5.1 shows the trend of ICDS over 30 years. As the number of blocks increasing, the number of beneficiaries has also risen in respect of children (0-6 years), pregnant and nursing mothers. Chart 5.3 shows that, number of recipients including PW & LM (Pregnant women and (Lactating Mothers) and children has been grown at a steady rate, at an average 9.2 percent from 2002 to 2008. Despite all initiatives,42 percent of children in India are suffering from malnutrition and most of them belong to the poor economic background. In this situation, most of the children from this family were away from schools to support the family income with their parents. So, it is necessary to take significant steps to prevent the children from hunger & malnutrition and also to enrol them in the nearby schools also. Mid Day meal scheme was introduced by the Govt of India to fill every child stomach irrespective of caste

**Figure 5.1 Number of blocks covered by ICDS**



Source: Evaluation report on integrated child Development service (Vol-I), Programme Evaluation Organisation, Planning Commission, GOI, 2011

**Figure 5.2 Number of beneficiaries through MDM in India**



Source: Evaluation report on integrated child Development service (Vol-I), Programme Evaluation Organisation, Planning Commission, GOI, 2011

and income. Before the MDM programme, several launch programmes were organised by different states. The following table shows the different launch programmes among different states:

**Table 5.1 Different types of launch programme across the various states.**

Name of the states	Year of introducing launch programme	Description
Andhra Pradesh	1995	Provision of giving 3kg wheat/rice per month to a child attendance over 80%
Madhya Pradesh	1995	Dalia was provided
Rajasthan	1995	Provision of giving wheat@ Rs.3 per kg per student per month
Arunachal Pradesh	1995	Dry rations was provided
Punjab	1995	Provision of giving wheat@ Rs.3 per kg per student per month
Himachal Pradesh	1995	Dry rations was provided
Jammu Kashmir	1995	Dry rations was provided
Meghalaya	1995	Dry rations was provided

Source: planning commission ,GOI,2010

Government schools were chosen for this project to provide the mid-day meal to the maximum number of children and the centrally sponsored scheme called mid-day meal was introduced in the all Govt.schools on 15th August 1995. The prime objectives of MDM were to increase enrolment, attendance and nutritional level among underprivileged children.MDM scheme was extended to all children studying (class 1-V) in Government, Government aided, local body schools, EGS and AIE centres.

National Programme of Nutritional Support to Primary Education (known as MDM) is the most significant launch programme and covering more than 12 crore children in nearly 10 lakh primary schools. Initially, the scheme was provided with the provision of minimum 300 calories and 8-12 grams protein. Central Govt. modified the scheme w.e.f September 2004 and the cooked meal was given to children in schools with the following components.

- i) Free food gains of 100gms (rice/wheat) per child.
- ii) Cooking assistance or cooking cost @ Re1 per child.
- iii) Reimbursement of transportation cost @ 75 per quintal.
- iv) Management, monitoring and evaluation cost @ 2 percent of the cost of the food grains, transport facility and cooking assistance.
- v) Provision of mid-day meal during summer vacation in drought-affected areas.

Again, the MDM was revised and extended to children studying in upper primary schools (classes V to VIII) and nutrition norms fixed by the Central Government for the child minimum of 700 calories and 20 grams protein by providing 150 grams of food grains per child. From 2009, Central Govt made some changes to improve the implementation of the MDM scheme. The modifications are

- i) Increase the Provision of quantity pulse from 25gms to 30gms and vegetables from 65gms to 70 gms.
- ii) Cooking cost increased from Rs.1.68 to Rs.2.50 for primary and Rs.2.20 to Rs.3.75 for upper primary.
- iii) The honorarium for cooks and helper was paid of Rs 0.40 per child per day.

Due to the successful implementation of the MDM, drop out ratio was substantially decreased and during 2012-13,10.68 crores children at primary level had been covered 12 lakh schools and 10.45 crore children were covered in 11.58 lakh schools during 2013-14.

### **5.2.1 Mid day Meal under National Food Security Act,2013**

The Govt. of India introduced “Mid Day Meal Rule 2015” on 30.9.2015. The provision related to mid-day meal scheme is included in the National Food Security Act,2013. The Ministry of HRD finalised the necessary provision and rules after consultation with state and other related Ministries. The rule was known as Midday Meal Rules,2015 and effected from the date of notification in the Gazette of India.food security allowances to be paid to beneficiaries in case of non-supply of meals for specified reasons. The significant features of this rule are as follows:

- a) Entitlements of children:** Every child shall be provided hot cooked meal having the nutritional standard of 450 calories and 12 gm of protein for primary and 700 calories and 20 gm protein for the upper primary level.The hot cooked meal shall be provided in the school premises only.
- b) Implementation of the scheme:** Each school shall have the facility for cooking meal in hygienic manner. Urban area schools may use the facility of centralised kitchen for cooking the MDM and meals should be served in the schools only.
- c) Management Committee-**As per Right To Free and Compulsory Education Act,2009, the SMC monitors the MDM scheme implementation and other provisions of the scheme like cleanness of the cooking place and hygiene of the meal.
- d) The utilisation of school fund-**In case of unavailability of the food grains .cooking cost from the Government, the head teacher of the school shall be authorised to use any fund of the school to continue the mid-day meal in the school. State Government shall be also liable to pay Food Security Allowance by 15th of the succeeding month due to unavailability of the food grains and other costs from Central.
- e)Testing of the meals-**The cooked mid-day meal shall be tested and evaluated by the Government Food Research Laboratory to confirm nutritional standard and quality.

### **5.2.2 Major Objectives of Mid Day Meal**

National Programme of Nutritional Support of Primary Education (NPNSPE) was introduced as a centrally sponsored scheme on 15th August 1995, covered 2408 blocks in the country. The Govt identified the principal objectives of MDM as education and food for all children by providing i) Improving nutritional status of children in classes I to VIII in Government, local body and Government aided schools and Education Guarantee Scheme (EGS), Alternative and innovative Education Centres. ii) Encouraging poor children from the disadvantaged community for regular class attendance and concentration on studies. iii) Nutritional support to elementary schools children especially drought affected areas. No doubt; human potential and development of the state are always facing challenges without proper education. The government has been spending a considerable amount to achieve the goal of 100 per cent universalisation of elementary education. The constitutional commitment of free education as ‘Right of children to free and compulsory education Act’ came into effect on 1st April 2010. However, still, children from weaker section of the society suffer from hungry, low nutrition and also proper care in education. Malnutrition affects in regular attendance and also overall objectives of the mission. The primary objectives of MDM are focussing mainly hunger and education by providing:

- i) Improving nutritional support of school going children in classes I-VIII in Government, local body and Government aided schools, and Education Guarantee Scheme (EGS) and Alternative and Innovative Education Centre (AIE) under Sarva Shiksha Abhiyan.
- ii) Encouraging poor children to attend school regularly by providing MDM in the schools.

No doubt education is one of the constitutional commitments in the development of human potential. Central and State Govt. are continuously trying to provide educational facilities to achieve the 100 per cent goal of universalisation of elementary education. So, the constitutional commitment has been implemented by the introduction of free and compulsory education of all children up to 14 years of age.

### 5.3. Background of Mid day Meal programme in Jalpaiguri Sadar and Rajganj Block:

In the district, Jalpaiguri, which was a part of West Bengal state, under “ Mid-day meal programme “ had responded very positively to all the children specified under the scheme. Jalpaiguri is regarded as one of the developed districts concerning education and employment. In this respect, MDM became a vital part of elementary education to attain the objectives of enrolment, retention and attendance in primary schools. Previously it was known as National Programme for Nutritional Support to Primary Education, but now it was revised as National Programme for Mid Day Meal.

**Table 5.2 Brief summary of Mid Day Meal Programme in Jalpaiguri**

1995 (introduction of MDM)-till 2002	National Programme of Nutritional Support to Primary Education was introduced and free food grains were provided to every child in primary schools (class I to V) in Govt, Local Body and Govt. aided schools.	
April 2002 to March 2003	The Project was extended through EGS and AIE and started serving cooked hot meal in all primary schools.	
2006	The programme was to upper primary class (VI to VIII) in Govt. and Govt. aided schools under the guidelines of NP-NSPE	
2007 onwards	Mid day meal programme started in all Govt, Primary and upper primary schools in all districts of the state.	
	Primary	upper primary
	(Cost of meal per child per school day)	
w.e.f July 2008	Rs.2.58	Rs.2.60
w.e.f 2009	Rs.3.00	Rs.3.75
w.e.f 2010	Rs.3.30	Rs.4.00
2011-12	Rs.3.40	Rs.4.40
w.e.f 01.07.2016	Rs.4.13	Rs.6.18

Source :NP-NSPE Guidelines 2010

The new version Cooking cost per child per day increased to Rs.4.13 and Rs.6.18 respectively for primary and upper primary schools. Central and State will share the cooking cost in the ratio of 60:40. Majority of the population of the district are in the village. So, it is evident from table no 5.3, a significant number of primary schools are situated in the villages

**Table 5.3 No of primary schools in West Bengal & Jalpaiguri**

Primary schools		2005-06	2013-14
	West Bengal		55603
Rural		42793	65692
% of school in rural area		76.96	85.34
Jalpaiguri		2002	3849
Rural		1829	3511
% of school in rural area		91.35	91.21

Source: Calculated from DISE data (2005-06 & 2013-14)

#### **5.4 Administrative Agencies of MDM at National, State, District and Village Level**

While implementing MDM, Central and State Government Should jointly work to achieve the goal of MDM and also State government should follow the guidelines which are issued by Central Govt. A committee is formed NSMC (National steering cum monitoring committee) to evaluate the impact and provide advice to the Central and also to monitor the programme. The MHRD is the nodal agency for sanction the funds to the different state Govt.

To execute the main objectives of MDM ,various central and state agencies are involved in the process like FCI (food corporation of India),the Department of Food and Civil Supplies, Department of social welfare at the state level , Department of Health and Family Welfare, Ministry of Food and Public Distribution Department are involved in the implementation process of MDM.

The school education department, Government of West Bengal is the nodal body for the introduction of mid-day meal in the state. The following state-level officers are responsible for administrative control of MDM.

- i) Project Director ii) Dy. Director (civil) iii) Dy Director (food) iv)MIS co-ordinator v)Accountant vi) Head Assistant vii)UDC viii) data entry operator.
- In the district, District

Magistrate is the nodal officer of this scheme with the help of SDOs , BDOs and other supporting staff.

Block level mid-day meal scheme is administered by the assistant inspector of school ,supervisor, assistant accountant and data entry operator. In a municipal level, the MDM scheme is managed by joint commissioner/chairman of the municipality, assistant accountant and a data entry operator.

In India, generally all the plans are formulated by the Central Govt, and state Government of different states act as an agent to implement the policies with the help of local administration. The state Govt. Are supposed to implement those policies that ensure the equal access to basic needs such as education, health, food, employment. State Government has to practice the central policies to eliminate the social and economic inequalities.

In this context, cooked mid-day meal programme was introduced to address the children of poor socio-economic background. Financial assistance and ration are provided by the central but the distribution and monitoring responsibility lies with the state Govt. The State Govt with the help of local bodies co-ordinates and maintains detail record of the MDM scheme. The record includes attendance of students of students, quantity of foods sanctioned from FCI, quantity of foods supplied to schools/blocks, expenditure incurred for salary to cooks, vegetables, and other cooking ingredients.

The MDM programme has been controlled and monitored by different agencies at the different level. These are shown as below:

**Table 5.4 Different types of monitoring agency**

<b>Different Agency</b>	<b>Agencies Responsible</b>
National Level	National Level Steering Cum monitoring Committee and Programme Approval Board
State Level	State Level Steering Cum monitoring Committee and Nodal Agency
District Level	District Magistrate/District Nodal Agency
Village Level	Gram Panchayat/Municipality
School Level	VEC,SMDC,PTA,MTA

Source:<http://mdm.nic.in>

#### 5.4.1 National Level steering Cum monitoring Committee

A monitoring system has been developed to manage and evaluate the system to attain the goal of the midday meal. As the cooked food is provided to the children, there is utmost need of quality, hygiene and safety of cooking items and kitchen. At the national level, NSMC and PAB were constituted under the MHRD for the smooth and effective functioning of MDM. NSMC is responsible for programme implementation, taking corrective actions, making coordination among different departments, mobilising community support, promoting PPP (Public-private partnership) model. The committee issued guidelines about the testing of the meal and it was stated that at least one teacher must test cooked meal and a register is to be maintained for that. Central assistance is given to all schools for making a kitchen-cum – stores for the safe storage of food items to avoid moisture and malpractice. The committee also specified the cooking cost for primary and upper primary classes per child per day for the purchase of cooking items. As per MDM guidelines, the logo of MDM should be made on the wall of the school to make aware of MDM to children, parents and other community members. As the District Magistrate should conduct meetings at least quarterly intervals.

**Figure-5.3 Logo of Mid Day Meal Scheme**



The committee also recommended the social audit of the scheme. The two districts of Andhra Pradesh conducted the social audit with the help of SSAAT (Society of Social Audit, Accountability and Transparency) to ensure public accountability in response to MDM. As the quality is an issue, there is a need for testing of food samples to judge the chemical contents such as moisture, fat, protein, vitamins. The laboratory report discloses the material facts about the cooked mid-day meal. The state should take an active part to ensure the quality of MDM through sample checking by CSIR and National Accreditation Board. Despite these,

if any unwanted incident in the school, Headmaster/Headmistress should be responsible for that. The district authorities (District education officer, District Health Officer, District Magistrate) should take immediate action, and prompt medical treatment is provided to children. The success of the scheme depends on supervision and control of Gram Panchayat at village level and municipality in the urban area. In every district, District Nodal Agency(DNA) is responsible for the implementation of the scheme with the help of DM, DSWO(District social welfare officer), BDO and gram panchayat or municipality members.DNA is provided monthly district allocation by SNA(state nodal agency), and DNA ensures that every school have allocated their part. At the village level, the implementation of MDM is managed by School Education Rural Development, Women and Child Development and Social Welfare. Involvement of NGOs, a self-help group in respect of supplying food is encouraged.

As per RTI guidelines, all the schools are required to display information in respect of above issues under MDM..Before the introduction of RTE Act,2009,most of the primary schools in urban and rural Jalpaiguri were brought under the coverage of MDM. The following tables shows the details mid day meal coverage in Jalpaiguri district.

**Table 5.5 Number of Institutions- (Primary) (Source data : Table AT-3A of AWP&B 2017-18)**

Sl. No.	Districts	No. of Institutions	No. of Institutions serving MDM	Non-Coverage	% NC
1	Jalpaiguri	1840	1840	0	0%

Souce:PAB-MDM 2017-18

**Table 5.6 Coverage of Children vs. Enrolment in North Bengal ( Primary) (AWP&B 2017-18)**

Sl. No.	Districts	Enrolment as on 30.9.2016	Average number of children availing MDM	Diff	% Diff
1	2	3	4	5=4-3	6
1	Alipurduar	114651	114069	-582	-1%
5	Cooch Behar	235784	232585	-3199	-1%
6	D/Dinajpur	141343	135403	-5940	-4%
7	U/Dinajpur	391477	372005	-19472	-5%
8	GTA	57300	56620	-680	-1%

Continued Table 5.6

**Table 5.6 Coverage of Children vs. Enrolment in North Bengal ( Primary) (AWP&B 2017-18)**

11	Jalpaiguri	180361	157800	-22561	-13%
13	Malda	493768	435279	-58489	-12%
21	Siliguri	78628	78183	-445	-1%

Souce:PAB-MDM 2017-18

**Table 5.7 Number of meal to be served and actual number of meal served during 2016-17**

Sr. No.	District	No of meals to be served during 1.4.2016 to 31.12.16	No of meal served during 1.4.16 to 31.12.16	% Meals Served
1	2	3	4	5
1	Alipurduar	16858632	16882212	100%
2	Bankura	52359132	36727532	70%
3	Birbhum	59083941	52835556	89%
4	Burdwan	96019273	83249704	87%
5	Cooch Behar	35078841	34422580	98%
6	Dakshin Dinajpur	20499003	20039644	98%
7	Uttar Dinajpur	63402122	55056740	87%
8	Gorkhaland Territorial Administration (GTA)	12288486	8379760	68%
11	Jalpaiguri	28475104	23354400	82%

Souce:PAB-MDM 2017-18

For example, in 2017-18, 100 per cent of all the schools in Jalpaiguri were found to have launched the MDM programme. However, the coverage was 87 per cent in 2017-18 in respect of average numbers of children availing MDM against total enrolment. Again the progress in MDM participation was also lowest among the other district in North Bengal. The

figures relate to the number of meal served, and it was found that Jalpaiguri had experienced a lower percentage of meal served.

**Table 5.8 Coverage of schools (Primary) in studied area under MDM scheme**

Sample Area		Primary(Govt.aided/Govt.Sponsored)	
		Total No. Schools	% of schools introduced MDM
Jalpaiguri	Urban	40	40 (100%)
Rajganj	Rural	40	40 (100%)
Total		80	80 (100%)

Source- Field survey

From the above table it was found that, all the private schools in Jalpaiguri sadar and Rajganj are not covered by MDM.

### 5.5 Perception of the students regarding Mid Day Meal Scheme

Children are the main stakeholders of the MDM scheme. To evaluate the programme the following components were measured to evaluate the scheme.

#### 5.5.1 Regularity of the Mid Day Meal:

It is the responsibility of the school authority that, mid day meal should be provided to each student in form of cooked food without any disturbance. The students (numbering 360) were asked about the regularity of the mid day meal. All the student respondents responded positively about the regularity of the MDM in Jalpaiguri and Rajganj block.

#### 5.5.2 Quality of the Food

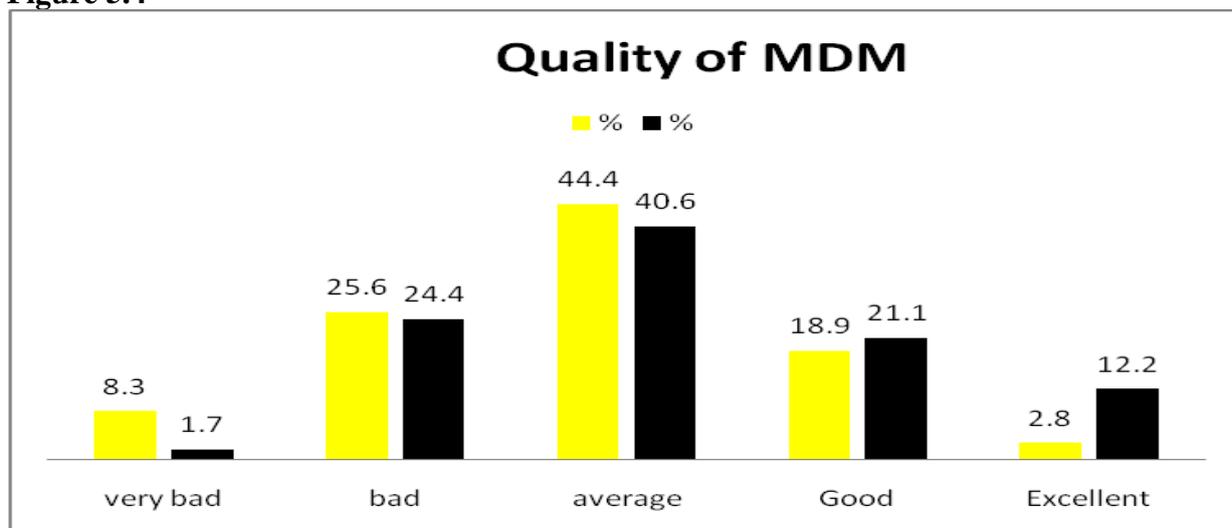
The students were asked about the quality of the food in respect of taste and smell of meals being provided to them. Their responses have been classified as “Excellent”, “Good”, “Average” and “Bad”. The analysis to this is shown below

**Table 5.9 Details of the quality of the Food**

Quality (taste and smell)	Jalpaiguri		Rajganj	
	Frequency	%	Frequency	%
very poor	15	8.3	3	1.7
poor	46	25.6	44	24.4
average	80	44.4	73	40.6
Good	34	18.9	38	21.1
Excellent	5	2.8	22	12.2
Total	180	100	180	100

Source-Field Survey

**Figure 5.4**



Source- Field Survey

The above analysis shows that, out of total 180 students in Jalpaiguri, 80 (44.4percent ) expressed “ average” opinion about food, followed “ Good” 34 (18.9 percent ),” Bad” 46 (25.6 percent ) and “ Excellent” 5 (2.8 percent). The investigator has found that rice was nicely cooked but the quality of rice was poor and vegetables include potatoes and soya bean only.

Out of 180 students from Rajgunj, 73 (40.6 percent) felt that the taste of the MDM is of average.The number of students who considered the taste of the food is excellent is 22 (12.2 percent). Further, out of 180 respondents, 3 (1.7 percent) highlighted the very poor quality of the mid-day meal. However, the majority of the respondents from Rajgunj considered the midday meal satisfactory..

### 5.5.3 Left over of MDM

The researcher investigated about the quality of the food and observed that there are some cases of leftover food.

**Table 5.10 Details of Leftover of food**

		Left over of the Meal n=180		
		Daily	Sometimes	Rare
Jalpaiguri	Number	9	128	43
	%	5	71.11	28.89
		Left over of the Meal n=180		
Rajganj		Daily	Sometimes	Rare
	Number	0	38	142
	%	0.00	21.11	78.89

Source-Field Survey

From the respondents, it was observed that 71.11 percent of students had ended their midday meal with some leftover food while 28.89 percent respondents replied with no leftover food in Jalpaiguri. There were only 5 percent of the total samples evidenced with leftover of food daily basis. However, in Rajganj block, 78.89 percent responded with no leftover of the food, and 21.11 percent students replied with some leftover of food. The researcher has not found in any cases of daily leftover of food in Rajganj block.

#### 5.5.4 Hygiene and safe issues of the MDM

**Table 5.11 Details of hygiene and safe of the MDM**

Jalpaiguri		Frequency	Valid Percent	Cumulative Percent
Hygienic MDM	Excellent	13	32.5	32.5
	Good	22	55	87.5
	Average	5	12.5	100
Rajganj		Frequency	Valid Percent	Cumulative Percent
Hygienic MDM	Excellent	11	27.5	27.5
	Good	27	67.5	95
	Average	2	5	100

Source-Field Survey

The most significant aspect of MDM is that MDM must be hygienic. To ascertain this, head teachers were asked about the safety and hygiene of MDM which is provided to school. The above table disclosed that 87.5 percent of the respondents in Jalpaiguri confirmed about the hygiene and safety of MDM whereas in Rajganj 95% confirmed in this respect. It may be highlighted that, 12.5 percent and 5 percent respondents in Jalpaiguri and Rajganj found the MDM safety and hygiene is an average nature.

One of the important considerations of MDM is that food must be hygienic and each school is expected to provide MDM with safety and utmost care. The guidelines on Food and Hygiene for providing MDM in schools have been formulated to ensure safety and hygiene food in respect of procurement, storage, preparation and serving of food items. The guidelines are as follows:

The headmaster is the authority of the school and his duty to implement the MDM successfully in his school. So, it is deemed essential to get information from 40 head teachers from Jalpaiguri with regard to hygiene factors in MDM. The headmaster responsibilities are as follows

- i) Only packed dal, salt and other ingredients with AGMARK quality symbol should be purchased.
  - ii) Vegetables should be purchased fresh and should be used as early as possible to avoid longer storing.
  - iii) All raw materials should be physically checked and cleaned.
  - iv) For chopping vegetables , a clean cut board should be used.
  - v) Cooking must be done with low lid to avoid loss of nutrients.
  - vi) Testing of the food by the teacher is mandatory .Maintenance of separate register for testing the food is compulsory.
  - vii) The Cooking accessories, cooking utensils and should be cleaned and must be kept in good condition. Cook and helper should be aware of personal hygiene and by annual health check up should be necessary.
  - viii) There should be provision within the daily routine in respect of washing hands with soap for all children, cooks and teacher.
  - ix) The Kitchen store should be clean and adequate for cooking .The premises should be kept free from all types of insects.
  - x) Continuous supply of water should be in the schools.
- In respect of all the hygiene factors mentioned above, the details analysis is shown as under:
- xi) The kitchen and the cooking areas should be cleaned every day prior to and after the meal is cooked.

### **5.6 Perception of the head teachers regarding Mid Day Meal Scheme**

For successful implementation of MDM, adequate supply of raw materials with standard quality should be supplied and proper implementation of this scheme depends on State Govt/ local bodies. An effort has been made to get to know the extent of hygiene factors facilities are available in schools from head teaches. To confirm this, “whether the meal is hygienic or not?” was asked and responses have been presented as below

**Table 5.12 Hygiene factors of MDM**

Jalpaiguri				Rajganj		
Hygiene Meals						
	Always	Sometimes	Rare	Always	Sometimes	Rare
Hygiene Factors			Hygiene Factors			
Purchase of AGMARK quality Rice,dal,etc	40 (100%)	0	0	40 (100%)		0
Purchase of fresh vegetables	40 (100%)	0	0	40 (100%)	0	0
Physically verification of raw materials	40 (100%)	0	0	40(100%)	0	0
cooking must be done with low lid	23(57.5%)	17 (42.5%)		35(87.5)	5(12.5%)	
Testing of the food by the teacher	40 (100%)			40 (100%)		
The kitchen and the cooking areas should be cleaned	40(100%)			40(100%)		
Cook and helper should be aware of personal hygiene and by annual health check up should be necessary			40 (100%)			40 (100%)
Continuous supply of water in the schools	40(100%)			40(100%)		

Source-Field Survey

All 40 headmaster/head teacher in Jalpaiguri Sadar and Rajganj have reported that they purchased the AGMARK quality of rice,dal and other ingredients from the local market. It may be highlighted that,headteacher or other teachers regularly have verified the raw materials which could be used for the cooking mid day meal. The 40 urban schools where the researcher has visited found the place of cooking in all schools separately maintained. All the schools have the facility of kitchen shed but researcher. found that all children bring their own plates from home for meal in the schools and after the meal, children themselves wash their plates and glasses.

For drinking water in schools, all the schools have the facility of useable drinking water facilities. But, researcher has not found a single water purifier in any schools. As cooking gas cost more and irregular supply, all schools depend on dry wood or bamboo for cooking. There is no separate place (dinning hall) for distribution of mid day meal in all the urban schools in Jalpaiguri municipality and mid day is served in the varanda. As there is provision of annual health check up of cook and helper as per guidelines issued by the MHRD on 13.02.2015. but , all the headmaster in the primary schools reported that no such initiatives have been taken so far.

## Chapter-VI

# **Evaluation of Mid Day Meal**

## **Data Analysis and Interpretation**

# **Chapter-VI**

## **Evaluation of Mid Day Meal**

### **Data Analysis and Interpretation**

#### **6.1 INTRODUCTION**

Data often refer to a set of sources on two or more variables. Collection of information, measurement and analysing of significance, conclusion and recommendations are made through data analysis in research. Conclusion and findings are usually drawn with the help of statistical methods and procedures. Data is first collected from sample area through a questionnaire, and the analysis of data is done with the help of SPSS software. After the collection of data, various charts, graphs and tables are prepared to summarise the data for better understanding and clarity. The statistical software has been used to interpret and analysis of data

Variables are appropriately set with the proper identification of dependent and independent variables in context with the hypothesis. Many research tools and techniques have been used in research work, but the specific tools and techniques are applied to each hypothesis relating to dependent and independent variables. The tests on hypothesis provide conclusions and results.

This section attempts to analyse the data with the help of statistical package for the social science (SPSS) and results have arrived it. The researcher has completed the survey in two selected sample area( Jalpaiguri Sadar and Rajgung with complete questionnaire and data was arranged in an excel sheet. The hypothesis has been created, and results have been tested using SPSS ( version 16) software. Various research methodologies have been used in research, but the appropriate research model should be used to determine the proper result. Different statistical techniques and tools were used for analysis included, tabulation of data, Co-relation analysis, regression analysis, Crosstab, Chi-square test.

The chi-square test is found to be more effective in establishing the relationship between dependent and independent variables. Kregg Cuellar (2011), Andrew S.Frye (2003)., Swati.S.Desai (2012) have used the chi-square test to ascertain whether there a statistically significant difference between the expected and observed frequencies in one or more categories. The chi-square test enables to explain the association between two or more

attributes and also whether the occurrence of events follows uniformity or not. In addition to that, contingency coefficient explains the relationship between variables to show their strength of a relationship.

Margaret.A.Waterman(2015),S.Srivastava (2013), Rajandran(2012), have used cross tabulation analysis to analysis the data and achieved the significant result.

E.L Daniel (2016),Sandra .k. Warner (2015) have used the t-test to analyse data to determine whether there is a significant difference between two means of the different group.

Jim Knutson-kolodzne (2017), Timothy plots(2011), T. Zsuzsanna & L. Marian (2012) have used multiple regression to examine how multiple independent variables are related to a dependent variable in arriving their result. Further, ANOVA test has been carried out on independent variables. Statistical tools used by them have resulted from excellent work.so.on the basis of such work, the researcher have adopted a similar type of statistical tools to research Jalpaiguri and Rajganj block.

## **6.2 Variables**

Aspects of Mid Day meal in Jalpaiguri Municipality and Rajganj block are dependent on independent variables which were the deciding factors for evaluation of MDM for these two sample areas. The independent variables are FAMILY INCOME,DAILY ATTENDANCE,ILLNESS or HEALTH ISSUES AFTER CONSUMPTION OF MEAL,ENROLMENT,TASTE,FEELING FULL STOMACH AFTER MDM,TIMELY DELIVEY OF MDM,CLEANNESS OF DINING AREA,DRINKING WATER,PROVISION OF WASHING HANDS,CLEANNESS OF KITCHEN STORE.

### 6.3 Hypothesis testing –Crosstab and Chi- square Test

#### 6.3.1 Cross tabulation analysis of parents in regard to satisfaction of MDM w.r.t family income in Jalpaiguri

**Table 6.1 Response analysis of parents regarding family Income and MDM satisfaction in Jalpaiguri**

Parents' satisfaction with MDM (Jalpaiguri)						Total
Frequency		Low	Moderate	High		
Income (F <sub>J</sub> )	up to 5000 (F <sub>J1</sub> )	Count	1	0	5	6
	Very low	% within Income	16.67	0.00	83.33	100.00
		% within Do parents satisfy with MDM	3.33	0.00	33.33	7.50
	5000-10000(F <sub>J2</sub> )	Count	4	7	1	12
	Low	% within Income	33.33	58.33	8.33	100.00
		% within Do parents satisfy with MDM	13.33	20.00	6.67	15.00
	10000-15000 (F <sub>J3</sub> )	Count	13	21	8	42
	Moderate	% within Income	30.95	50.00	19.05	100.00
		% within Do parents satisfy with MDM	43.33	60.00	53.33	52.50
	15000> (F <sub>J4</sub> )	Count	12	7	1	20
	High	% within Income	60.00	35.00	5.00	100.00
		% within Do parents satisfy with MDM	40.00	20.00	6.67	25.00
Total		Count	30	35	15	80

Source-Field Survey

The analysis of cross-tabulation on variable family income(F<sub>J</sub>) disclosed that count of 35 out of 80 (43.75%) parents agreed that, they always have been moderately satisfied with MDM and 30 (37.5 percent) not satisfied with MDM.

Among the different income groups,F<sub>J1</sub>(0-Rs.5000) and F<sub>J2</sub> (Rs.5000-10,000) were satisfied somewhat about the provision of MDM At a glance, parents shows their disagreement about satisfaction of MDM w.r.t increase of their income level.

#### 6.3.2 Chi square test on family income and MDM satisfaction in Jalpaiguri

For assessing the response of the parents between family income and mid-day meal satisfaction by their children in Jalpaiguri, the chi-square test was used with the following hypothesis.

## Hypotheses 1

H<sub>0</sub>= Family income and mid day meal satisfaction are independent

H<sub>1</sub>== Family income and mid day meal satisfaction are not independent

Table 6.2

**Table 6.2 Chi square and correlation test on family income and MDM satisfaction**

Chi-Square Tests				Correlation		
	Value	df	Asymp.Sig (2 sided)		r	Sig
Pearson Chi-Square	23.92381	6	.001	Pearson correlation	-0.345	.001
Likelihood Ratio	21.1418	6	.002			
Linear-by-Linear Association	9.415399	1	0.002			
N of Valid Cases	80					

Analysis of the above table revealed that the relationship between family income and mid-day meal satisfaction in the Jalpaiguri was high. The calculated value of chi-square (23.92) is more than table value of chi-square (12.59) at  $P \leq 0.05$  level,  $df=1$ . Thus null hypothesis (H<sub>0</sub>) “Family income and mid-day meal consumption are independent” is rejected while the alternative hypothesis (H<sub>1</sub>) “Family income and mid-day meal consumption are not independent” was accepted. The coefficient of calculated contingency was  $C=0.480$ . It was found that family income as a parameter had a significant role in the satisfaction of mid-day meal in Jalpaiguri. By correlation analysis, it has been found that there is negative ( $r= -0.345$ ) and significant relationship between satisfaction of MDM and family income.

### 6.3.3 Cross tabulation analysis of parents in regard to satisfaction of MDM w.r.t family income in Rajganj

**Table 6.3 Response analysis of parents regarding family Income and MDM satisfaction in Rajganj**

parents satisfaction with MDM		Low	Moderate	High		
Income (Fr)	0-5000(Fr1) (very Low)		2	2	7	11
		% within income Rajganj	18.18	18.18	63.64	100.00
		% within Do parents satisfy with MDM	16.67	6.25	19.44	13.75
	5000-10000 (Fr2)	Count	5	24	20	49
	Low	% within income Rajganj	10.20	48.98	40.82	100.00
		% within Do parents satisfy with MDM	41.67	75.00	55.56	61.25
	10000-15000 (Fr3)	Count	4	6	7	17
	Moderate	% within income Rajganj	23.53	35.29	41.18	100.00
		% within Do parents satisfy with MDM	33.33	18.75	19.44	21.25
	15000> (Fr4)	Count	1	0	2	3
	High	% within income Rajganj	33.33	0.00	66.67	100.00
		% within Do parents satisfy with MDM	8.33	0.00	5.56	3.75
	Total	Count	12	32	36	80
		% within income Rajganj	15	40	45	100

Source-Field Survey

The analysis of cross tabulation on variable  $F_r$  revealed that the highest count 45 out of 80 (56.25 percent), parents agreed that they have highly satisfied with MDM always irrespective of their family income. Among the different income groups, Fr1 have expressed their strong opinion about the satisfaction of mid day meal daily basis,

### 6.3.4 Chi square and correlation test on family income and MDM satisfaction in Rajganj

For assessing the response of the parents between family income and mid day meal satisfaction by their children in Jalpaiguri, chi square test was used with the following hypothesis

#### Hypothesis 2

$H_0$  = Family income and mid day meal consumption are independent

$H_1$  = Family income and mid day meal consumption are not independent

**Table 6.4 Chi square and correlation test on family income and MDM satisfaction**

Chi-Square Tests				Correlation		
	Value	df	Asymp. Sig. (2-sided)		r	Sig
Pearson Chi-Square	7.321 <sup>a</sup>	6	.292	Pearson correlation	-	.351
Likelihood Ratio	8.458	6	.206			
Linear-by-Linear Association	.657	1	.418			
N of Valid Cases	80					
a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .45.						

The analysis of above table disclosed that the relationship between family income and mid-day meal consumption in Rajganj was low. This indicated that there is no significant association between family income and mid-day meal satisfaction. The calculated value of Chi-square (7.321) is less than the table value of chi-square (12.59) at  $P \leq 0.05$  level df 6. The null hypothesis (H0) “Family income and mid-day meal consumption are independent”, was accepted and while alternative hypothesis(H1) “Family income and mid-day meal consumption are not independent” was rejected.

By correlation analysis, it is observed that there is a negative relationship ( $r = -0.091$ ) and an insignificant relationship between satisfaction and income level of parents.

### 6.3.5 Cross tabulation analysis of parents regarding MDM quantity w.r.t Health Problems in Jalpaiguri

**Table 6.5 Response analysis of parents regarding MDM quantity and health problems in Jalpaiguri**

Children provided sufficient quantity MDM		Low	Moderate	High	Total	
Children suffer from illness	High	Count	3	12	2	17
		% within Do your children suffer	17.65	70.59	11.76	100.00
		% within children provided sufficient quantity MDM	37.50	35.29	5.26	21.25
	Moderate	Count	1	10	4	15
		% within Do your children suffer	6.67	66.67	26.67	100.00
		% within children provided sufficient quantity MDM	12.50	29.41	10.53	18.75
	Low	Count	4	12	32	48
		% within Do your children suffer	8.33	25.00	66.67	100.00
		% within children provided sufficient quantity MDM	50.00	35.29	84.21	60.00
Total		Count	8	34	38	80
		% within Do your children suffer	10	42.5	47.5	100

Source-Field Survey

The analysis of cross-tabulation revealed that the highest count of 48 out of 80 (about 60 per cent) of the parents agreed that health problems rarely occur to their children

### 6.3.6 Chi square and correlation test on MDM quantity and health problems in Jalpaiguri

#### Hypothesis 3

$H_0$  = There is no significant association between quantity of MDM and health problem of the children in Jalpaiguri

$H_1$  = There is significant association between quantity of MDM and health problem of the children Jalpaiguri.

**Table 6.6 Chi square and correlation test on MDM quantity and health problem**

Chi-Square Tests				Correlation		
	Value	df	Asymo Sig (2 sided)	Pearson Correlation	r	Sig
Pearson Chi-Square	19.62326	4	0.001		-0.405	0.000
Likelihood Ratio	21.07737	4	0.000			
Linear-by-Linear Association	12.95235	1	0.000			
N of Valid Cases	80					

The analysis of above table disclosed that the relationship between quantity and health problem in Jalpaiguri was high. It indicated that there is a significant association between quantity and health problem. The calculated value of Chi-square (19.62 ) is more than the table value of chi-square (9.49) at  $P \leq 0.05$  level df 4. The null hypothesis ( $H_0$ ) “There is no significant association between quantity of MDM and health problem of the children.”, was rejected and while alternative hypothesis ( $H_1$ ) “There is a significant association between the quantity of MDM and health problem of the children” was accepted

By correlation analysis, it has been examined that there is a negative and significant correlation ( $r = -0.405$ ) found between quantity and health problem. It means that there is the possibility of student would suffer less from health problem by proving a sufficient amount of MDM.

### 6.3.7 Cross tabulation analysis of parents regarding MDM quantity and Health Problems in Rajganj

**Table 6.7 Response analysis of parents regarding MDM quantity and health problems in Rajganj.**

Children provided sufficient quantity MDM		Low	Moderate	High	Total	
children suffer illness	Low	Count	5	3	19	27
		% within illness	18.52	11.11	70.37	100.00
		% within quantity	41.67	18.75	36.54	33.75
	Moderate	Count	6	5	17	28
		% within illness	21.43	17.86	60.71	100.00
		% within quantity	50.00	31.25	32.69	35.00
	High	Count	1	8	16	25
		% within illness	4.00	32.00	64.00	100.00
		% within quantity	8.33	50.00	30.77	31.25
Total		Count	12	16	52	80
		% within illness	15	20	65	100

Source-Field Survey

The analysis of cross-tabulation revealed that of 25 out of 80 (about 31 per cent) of the parents agreed that health problems frequently occur to their children and 28(35 per cent) parents confirmed about the occurrence of illness frequently.

### 6.3.8 Chi square and correlation test on MDM quantity and health problems in Rajganj

#### Hypothesis-4

$H_0$  = There is no significant association between quantity of MDM and health problem of the children in Rajganj

$H_1$  = There is significant association between quantity of MDM and health problem of the children Rajganj

**Table 6.8 Chi square and correlation test on MDM quantity and health problem in Rajganj**

Chi-Square Tests				Correlation		
	Value	df	Asymo Sig (2 sided)	Pearson Correlation	r	Sig
Pearson Chi-Square	6.1446547	4	0.189			
Likelihood Ratio	6.8052658	4	0.147			
Linear-by-Linear Association	0.1382448	1	0.71			
N of Valid Cases	80				0.042	0.713

The analysis of above table disclosed that the relationship between quantity and health problem in Rajganj was low. It indicated that there is no significant association between quantity and health problem. The calculated value of Chi-square (6.14 ) is less than the table value of chi-square (9.49) at  $P \leq 0.05$  level df 4. The null hypothesis ( $H_0$ ) “There is no significant association between quantity of MDM and health problem of the children.”, was accepted and while alternative hypothesis ( $H_1$ ) “There is a significant association between the quantity of MDM and health problem of the children” was rejected

By correlation analysis, it has been examined that there is a very little and insignificant correlation ( $r = 0.042$  ) is found between quantity and health problem. It means that there is a possibility that by providing a sufficient quantity of MDM student would suffer from a health problem.

### 6.3.9 Cross Tabulation of Mid Day meal satisfaction and Daily attendance in Jalpaiguri

**Table 6.9 Response analysis of students regarding beneficiary satisfaction (students) and attendance in Jalpaiguri**

MDM Beneficiary's satisfaction & attendance in Jalpaiguri			Attendance					Total
			Never	Rare	sometimes	very Often	Always	
Beneficiary Satisfaction	YES	Count	0	16	48	70	14	148
		% within satisfaction	0.00%	10.80%	32.40%	47.30%	9.50%	100.00%
		% within attendance	0.00%	72.70%	88.90%	81.40%	82.40%	82.20%
		% of Total	0.00%	8.90%	26.70%	38.90%	7.80%	82.20%
	NO	Count	1	6	6	16	3	32
		% within satisfaction	3.10%	18.80%	18.80%	50.00%	9.40%	100.00%
		% within attendance	100.00%	27.30%	11.10%	18.60%	17.60%	17.80%
		% of Total	0.60%	3.30%	3.30%	8.90%	1.70%	17.80%
Total		Count	1	22	54	86	17	180

Source-Field Survey

The analysis of cross-tabulation on revealed that the highest count of 86 out of 180 (about 47 per cent) of the students indicated they have agreed that they came to school very often. It is clear from the table that, out 180 students 17( 9.4 per cent) recorded as very high attendance. Likewise,out of 180 students,148 (82.2 per cent) confirmed that they have a favourable opinion about the mid-day meal which was provided in the school. In the case of attendance, those out of 148 students,16 (10.8 per cent) students have shown their disinterest in respect to come to school every day.

### 6.3.10 Chi square and correlation test on beneficiary satisfaction (students) and daily attendance in Jalpaiguri

#### Hypothesis 5

H<sub>0</sub>= There is no significant association between MDM satisfaction and Attendance

H<sub>1</sub>= There is significant association between MDM satisfaction and Attendance

**Table 6.10 Chi square and correlation test on beneficiary satisfaction (students) and daily attendance in Jalpaiguri**

Chi-Square Tests				Correlation test	
	Value	df	Asymp. Sig. (2-sided)	Pearson Correlation	-.053 (Sig0.482)
Pearson Chi-Square	7.664 <sup>a</sup>	4	.105		
Likelihood Ratio	6.547	4	.162		
Linear-by-Linear Association	.497	1	.481		
N of Valid Cases	180				

The analysis of above table disclosed that the relationship between attendance and mid-day meal satisfaction in Jalpaiguri was low. This indicated that there is no significant association between family income and mid-day meal consumption. The calculated value of Chi-square (7.436) is less than the table value of chi-square (7.81) at  $P \leq 0.05$  level df 3. The null hypothesis (H0) "There is no significant association between MDM satisfaction and Attendance, was accepted and while alternative hypothesis(H1) "There is a significant association between MDM and Attendance " was rejected

By correlation analysis, it is observed that there is a negative relationship ( $r = -0.053$ ) and the insignificant relationship between attendance and MDM satisfaction.

### 6.3.11 Cross Tabulation analysis of Mid Day meal satisfaction and Daily attendance in Rajganj

**Table 6.11 Response analysis of students regarding beneficiary satisfaction (students) and attendance**

MDM Beneficiary's satisfaction & attendance in Rajganj		Attendance				Total	
		Rare	Sometimes	Very often	Always		
Beneficiary Satisfaction	YES	Count	5	2	92	65	164
		% within Do you like MDM l(Raj)	3.00%	1.20%	56.10%	39.60%	100.00%
		% within Come to school every day(Rajganj)	62.50%	18.20%	96.80%	98.50%	91.10%
	NO	Count	3	9	3	1	16
		% within Do you like MDM l(Raj)	18.80%	56.20%	18.80%	6.20%	100.00%
		% within Come to school every day(Rajganj)	37.50%	81.80%	3.20%	1.50%	8.90%
Total		Count	8	11	95	66	180

Source-Field Survey

The analysis of (midday meal satisfaction ) disclosed that the highest count of 95 out of 180 (about 52. per cent) of the students confirmed that they came to school frequently. It is also found that 66 (36.7 per cent) respondents confirmed their daily attendance at the school which is higher than Jalpaiguri. Only 8 (4.44 percent ) recorded as low attendance.

From the above table, it is clear that 164 (91.1%) confirmed that, they have a high opinion about the midday meal. However, it also significant that out of 180 respondents,16 (8.9 per cent) said that they have not satisfied with the midday meal.

### 6.3.12 Chi square and correlation test on beneficiary satisfaction (students) and daily attendance in Rajganj

#### Hypothesis-6

H<sub>0</sub>= There is no significant association between MDM satisfaction and Attendance

H<sub>1</sub>= There is significant association between MDM satisfaction and Attendance

**Table 6.12 Chi square and correlation test student’s satisfaction in MDM and attendance in Rajganj**

Chi-Square Tests				Correlation test		
	Value	df	Asymp. Sig. (2-sided)	Pearson Correlation	r	Sig
Pearson Chi-Square	88.610 <sup>a</sup>	3	.000		0.456	.001
Likelihood Ratio	49.969	3	.000			
Linear-by-Linear Association	37.256	1	.000			
N of Valid Cases	180					

Analysis of table revealed that the relationship between midday meal and attendance in Rajganj was high. The calculated value of  $\chi^2$  (88.610) is more than the table value of  $\chi^2$  (7.81) at  $P \leq 0.05$  level,  $df=3$ . The null hypothesis (H0) “There is no significant association between MDM and Attendance”, thus is rejected while the alternative hypothesis (H1) “There is a significant association between MDM satisfaction and Attendance” was accepted.

Through correlation analysis , the relationship has been studied between two variables i.e attendance and satisfaction of MDM in response to students opinion. The Pearson’s value is 0.456 indicates that there is a positive and significant association between two variables

### 6.3.13 Cross tabulation analysis of MDM quantity and health problems/illness in Jalpaiguri

**Table 6.13 Response analysis of students regarding MDM quantity and Health Problems/illness in Jalpaiguri**

children provided sufficient quantity MDM			Low	Moderate	High	Total
Illness/health problems	Low	Count	8	21	97	126
		% within illness	6.35	16.67	76.98	100.00
		% within Quantity	34.78	60.00	79.51	70.00
	Moderate	Count	7	12	18	37
		% within illness	18.92	32.43	48.65	100.00
		% within Quantity	30.43	34.29	14.75	20.56
	High	Count	8	2	7	17
		% within illness	47.06	11.76	41.18	100.00
		% within Quantity	34.78	5.71	5.74	9.44
Total		Count	23	35	122	180
		% within illness	12.78	19.44	67.78	100.00

Source-Field Survey

The above table disclosed that 122 (67.78 per cent) respondents agreed that they had provided sufficient quantity of MDM frequently

The analysis of above table disclosed that the highest count of 126 out of 180 ( 70 per cent ) of the students confirmed that they there was no illness or health problems after the midday meal consumption. From the table, it is clear that a very few numbers of students 17(9.44 per cent) responded about the illness.

### 6.3.14 Chi square and correlation test on MDM quantity and health problems/ illness in Jalpaiguri

#### Hypothesis-7

H<sub>0</sub>= There is no significant association between quantity of MDM and health problem of the children in Jalpaiguri

H<sub>1</sub>== = There is significant association between quantity of MDM and health problem of the children Jalpaiguri

**Table 6.14 Chi square and correlation test on MDM quantity and health problems/illness**

Chi-Square Tests				Correlation		
	Value	df	Asymo Sig (2 sided)	Pearson Correlation	r	Sig
Pearson Chi-Square	30.37598	4	.000		-0.360	.000
Likelihood Ratio	24.75123	4	.000			
Linear-by-Linear Association	23.18431	1	.000			
N of Valid Cases	180					

The above table disclosed that the relationship between MDM quantity and illness of MDM in the Jalpaiguri was high. The calculated value  $\chi^2$  (30.37) is more than the table value of  $\chi^2$  (9.49) at  $P \leq 0.05$  level;  $df=4$ . The null hypothesis ( $H_0$ ). Hence rejecting null hypothesis while the alternative hypothesis “There is a significant association between MDM quantity and illness of MDM” was accepted. By correlation analysis, it has been examined that there is a negative and significant correlation ( $r = -0.360$ ) is found between quantity and health problem. It means that there is a possibility of student would suffer less from health problem by proving a sufficient amount of MDM.

**6.3.15 Cross tabulation analysis of MDM quantity and health problems/illness in Rajganj**

**Table 6.15 Response analysis of students regarding MDM quantity and Health Problems/illness in Rajganj**

children provided sufficient quantity MDM		Low	Moderate	High	Total	
Illness	Low	Count	6	3	60	69
		% within Illness	8.70	4.35	86.96	100.00
		% within quantity	31.58	42.86	38.96	38.33
	Moderate	Count	5	1	44	50
		% within Illness	10.00	2.00	88.00	100.00
		% within quantity	26.32	14.29	28.57	27.78
	High	Count	8	3	50	61
		% within Illness	13.11	4.92	81.97	100.00
		% within quantity	42.11	42.86	32.47	33.89
Total		Count	19	7	154	180
		% within Illness	10.56	3.89	85.56	100.00

Source-Field Survey

The above table disclosed that 154 (85.56 per cent) respondents agreed that they had provided sufficient quantity of MDM frequently

The analysis of above table disclosed that the highest count of 69 out of 180 ( 38.33 per cent) of the students confirmed that they there was no illness or health problems after the midday meal consumption. From the table, it is clear that a significant (61.66 per cent) number of students responded about the illness or health problems.

### 6.3.16 Chi square and correlation test on MDM quantity and health problems/illness in Rajganj

#### Hypothesis-8

H<sub>0</sub>= There is no significant association between quantity of MDM and health problem of the children in Rajganj

H<sub>1</sub>== = There is significant association between quantity of MDM and health problem of the children in Rajganj

**Table 6.16 Chi square and correlation test on MDM quantity and health problems/illness**

Chi-Square Tests				Correlation		
	Value	df	Asymo Sig (2 sided)		r	Sig
Pearson Chi-Square	1.4240263	4	0.840	Pearson Correlation	-0.062	0.407
Likelihood Ratio	1.4982726	4	0.827			
Linear-by-Linear Association	0.6927551	1	0.405			
N of Valid Cases	180					

The above table disclosed that the relationship between MDM quantity and illness of MDM in the Jalpaiguri was high. The calculated value  $\chi^2$  (1.424) is less than the table value of  $\chi^2$  (9.49) at  $P \leq 0.05$  level;  $df=4$ . Hence accepting the null hypothesis while the alternative hypothesis “There is a significant association between MDM quantity and illness of MDM” was rejected.

By correlation analysis, it has been examined that there is a negative and insignificant correlation ( $r = -0.062$ ) is found between quantity and health problem. It means that there is the possibility of student would suffer less from health problem by proving a sufficient amount of MDM. It implies an increase of sufficient quantity of MDM would not decrease the health problems.

### 6.3.17 Cross tabulation analysis of MDM quality and overall satisfaction in MDM in Jalpaiguri

**Table 6.17 Response analysis of parents regarding quality of MDM and overall satisfaction**

children provided sufficient quality of MDM		Low	Moderate	High	Total	
satisfy with MDM	Low	Count	23	5	2	30
		% within satisfy with MDM	76.67	16.67	6.67	100.00
		% within quality	53.49	20.00	16.67	37.50
	Moderate	Count	19	14	2	35
		% satisfy with MDM	54.29	40.00	5.71	100.00
		% within quality	44.19	56.00	16.67	43.75
	High	Count	1	6	8	15
		% within satisfy with MDM	6.67	40.00	53.33	100.00
		% within quality	2.33	24.00	66.67	18.75
Total		Count	43	25	12	80

Source-Field Survey

The above table disclosed that 12 (15 per cent) respondents agreed that sufficient good quality of MDM supplied. The analysis of the above table disclosed that the highest count of 43 out of 80 ( 56.73 per cent) of the parents perceived that poor quality of MDM supplied to their children.

### 6.3.18 Chi square and correlation test on MDM quality and overall satisfaction of MDM in response to parents in Jalpaiguri

#### Hypothesis 9

H<sub>0</sub>-Quality of MDM has no significant impact on overall satisfaction of MDM in response to parents in Jalpaiguri

H<sub>1</sub>- Quality of MDM has significant impact on overall satisfaction of MDM in response to parents in Jalpaiguri

**Table 6.18 Chi square and correlation test on MDM quality and overall satisfaction**

Chi-Square Tests				Correlation		
	Value	df	Asymo Sig (2 sided)		r	Sig
Pearson Chi-Square	30.48151	4	.000	Pearson Correlation	0.521	.000
Likelihood Ratio	29.31854	4	.000			
Linear-by-Linear Association	21.4446	1	.000			
N of Valid Cases	80					

The above table disclosed that the relationship between MDM quality and satisfaction of MDM in Jalpaiguri. The calculated value  $\chi^2$  (30.48) is more than the table value of  $\chi^2$  (9.49) at  $P \leq 0.05$  level;  $df=4$ . Hence rejecting null hypothesis while the alternative hypothesis accepted.

By correlation analysis, it has been examined that there is a positive and significant correlation ( $r= 0.521$ ) is found between quality and satisfaction. It means that there is a possibility of increasing satisfaction by providing sufficient quality of MDM.

### 6.3.19 Cross tabulation analysis of MDM quality and overall satisfaction in MDM in Rajganj

**Table 6.19 Response analysis of parents regarding quality of MDM and overall satisfaction**

children provided sufficient quality of MDM		Low	Moderate	High	Total	
satisfy with MDM	Low	Count	12	3	2	17
		% within satisfy with MDM	70.59	17.65	11.76	100.00
		% within Quality	46.15	6.98	18.18	21.25
	Moderate	Count	13	19	3	35
		% within satisfy with MDM	37.14	54.29	8.57	100.00
		% within Quality	50.00	44.19	27.27	43.75
	High	Count	1	21	6	28
		% within satisfy with MDM	3.57	75.00	21.43	100.00
		% within Quality	3.85	48.84	54.55	35.00
Total		Count	26	43	11	80
		% within satisfy with MDM	32.5	53.75	13.75	100
		% within Quality	100	100	100	100

Source-Field Survey

The above table disclosed that 11 (13.75 per cent) respondents agreed that sufficient good quality of MDM supplied. The analysis of the above table disclosed that the highest count of 43 out of 80 ( 53.75 per cent) of the parents perceived that average quality of MDM supplied to their children.

### 6.3.20 Chi square and correlation test on MDM quality and overall satisfaction of MDM in response to parents in Rajganj.

#### Hypothesis 10

H<sub>0</sub>-Quality of MDM has no significant impact on overall satisfaction of MDM in response to parents in Rajganj.

H<sub>1</sub> - Quality of MDM has significant impact on overall satisfaction of MDM in response to parents in Rajganj

**Table 6.20 Chi square and correlation test on MDM quality and overall satisfaction in Rajganj**

Chi-Square Tests				Correlation		
	Value	df	Asymo Sig (2 sided)	Pearson Correlation	r	Sig
Pearson Chi-Square	23.439037	4	.000		0.443	.000
Likelihood Ratio	27.221381	4	.000			
Linear-by-Linear Association	15.469655	1	.000			
N of Valid Cases	80					

The above table disclosed that the relationship between MDM quality and satisfaction of MDM in Rajganj. The calculated value  $\chi^2$  (27.22) is more than the table value of  $\chi^2$  (9.49) at  $P \leq 0.05$  level;  $df=4$ ..Hence rejecting null hypothesis while the alternative hypothesis accepted.

By correlation analysis, it has been examined that there is a positive and significant correlation ( $r= 0.443$ ) is found between quality and satisfaction. It means that there is a possibility of increasing satisfaction by providing sufficient quality of MDM.

**Table 6.21 Summary of Hypothesis Testing**

Hypothesis No	Jalpaiguri				Rajganj		
	Null Hypothesis	Tools Used	Decision	Conclusion	Tools Used	Decision	Conclusion
1&2	Family income and mid day meal consumption	Chi square (Sig 0.001)	H <sub>0</sub> Rejected	Family income as a parameter had significant role on the consumption of mid day meal and negative significant relationship between two variables	Chi Square (Sig 0.292)	H <sub>0</sub> Accepted	Family income and mid day meal consumption are independent and negative insignificant relationship between two variables
		Correlation (sig 0.001)			Correlation (sig 0.351)		
3&4	MDM quantity and illness/ health problems	Chi Square (Sig 0.001)	H <sub>0</sub> Rejected	significant association between MDM quantity and illness/ health problems of MDM and there is possibility of student would suffer less from health problem by proving sufficient amount of MDM.	Chi Square (Sig0.189)	H <sub>0</sub> Accepted	No Significant association between quantity of MDM and health problem of the children and there is a very little and in significant correlation (r= 0.042 ) is found between quantity and health problem
		Correlation (sig 0.000)			Correlation ( Sig 0.713)		
5&6	MDM satisfaction and Attendance	Chi Square (sig 0.105)	H <sub>0</sub> Accepted	no significant association between MDM satisfaction and Attendance and is a negative relationship (r= - 0.084 ) between two variables	Chi Square (Sig 0.000)	H <sub>0</sub> Rejected	significant association between MDM satisfaction and Attendance and there is positive and significant association between two variables.
		Correlation (sig 0.482)			Correlation ( Sig 0.001)		
7 &8	MDM quantity and health problem of the children	Chi Square (Sig 0.00)	H <sub>0</sub> Rejected	significant association between MDM quantity and illness of MDM and there is possibility of student would suffer less from health problem by proving sufficient amount of MDM.	Chi Square (Sig 0.840)	H <sub>0</sub> Accepted	Negative and in significant correlation (r= -0.062 ) is found between quantity and health problem and no significant association between quantity of MDM and health problem
		Correlation (sig 0.000)			Correlation (sig 0.407)		
9 & 10	Quality of MDM and satisfaction of MDM	Chi Square (Sig 0.00)	H <sub>0</sub> Rejected	Quality of MDM has significant impact on overall satisfaction of MDM and positive and significant correlation (r= 0.521 ) is found between quality and satisfaction	Chi Square (Sig 0.00)	H <sub>0</sub> Rejected	positive and significant correlation (r= 0.443 ) is found between quality and satisfaction and Quality of MDM has significant impact on overall satisfaction of MDM
		Correlation (sig 0.000)			Correlation (sig 0.000)		

**6.4 Measuring the association or relationship between Urban (Jalpaiguri Municipality) and Rural (Rajganj) in respect to increase in enrolment, drop out, attendance, improvement in study, quality and quantity of MDM , impact on nutritional and educational, in response to teachers**

**Hypothesis 11**

**H<sub>0</sub>**-There is no significant association between location of the school (rural and urban) and increase in enrolment which has an overall impact on SSA, in response of teachers.

**H<sub>1</sub>**- There is significant association between location of the school (rural and urban) and increase in enrolment which has an overall impact on SSA, in response of teachers

**Table 6.22 Cross tabulation analysis between area (urban and rural) and increase in enrolment**

		Increase in enrolment			Total	
			Disagree	undecided	Agree	
Area	Jalpaiguri (Urban)	Count	38	6	36	80
		% within area	47.5	7.5	45	100
		% within Increase in enrolment	77.55	60	35.64	50
	Rajganj (Rural)	Count	11	4	65	80
		% within area	13.75	5	81.25	100
		% within Increase in enrolment C	22.44	40	64.35	50
Total		Count	49	10	101	160
		% within area	30.62	6.25	63.12	100

Source-Field Survey

**Table 6.23 Chi square test to access the association between area (urban and rural) and increase in enrolment**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.604 <sup>a</sup>	2	.000
Likelihood Ratio	24.588	2	.000
Linear-by-Linear Association	23.414	1	.000
N of Valid Cases	160		

From the above table, chi-square is significant (Significant value is less than .05), hence rejecting the null hypothesis. It means there is a significant difference location of the school (rural and urban) and increases in enrolment which has an overall impact on SSA.

### Hypothesis 12

H0- There is no significant difference between the location of the schools (rural and urban) in the response of teachers and their opinion on reduction in drop out which has a significant impact on the performance of SSA.

H1- There is a significant difference between the location of the schools (rural and urban) in the response of teachers and their opinion on reduction in drop out which has a significant impact on the performance of SSA.

**Table 6.24 Cross tabulation analysis between area (urban and rural) and reduction in drop out.**

		Reduction in drop out				Total
			Disagree	Undecided	Agree	
Area	Jalpaiguri (Urban)	Count	9	16	55	80
		% within area	11.25	20	68.75	100
		% within Reduction in drop out	60	64	45.83	50
		% of Total	5.62	10	34.37	50
	Rajganj (Rural)	Count	6	9	65	80
		% within area	7.5	11.25	81.25	100
		% within Reduction in drop out	40	36	54.16	50
		% of Total	3.75	5.62	40.62	50
Total	Count	15	25	120	160	
	% within area	9.37	15.62	75	100	

Source-Field Survey

**Table 6.25 Chi square test to access the association between area (urban and rural) and reduction in drop out**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.393 <sup>a</sup>	2	.183
Likelihood Ratio	3.425	2	.180
Linear-by-Linear Association	2.541	1	.111

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.393 <sup>a</sup>	2	.183
Likelihood Ratio	3.425	2	.180
Linear-by-Linear Association	2.541	1	.111
N of Valid Cases	160		

From the above table, it is revealed that chi-square value is not significant as the significance value is higher than 0.05, hence null hypotheses is accepted. It means there is there is no significant difference between the location of the schools (rural and urban) in the response of teachers and their opinion on reduction in drop out which has a significant impact on the performance of SSA

### Hypothesis 13

**H0-**There is no significant difference between the location of the school (rural and Urban) and teachers' opinion on an increase in school attendance which has an overall impact on SSA.

**H1-** There is a significant difference between the location of the school (rural and Urban) and teachers' opinion on an increase in school attendance which has an overall impact on SSA

**Table 6.26 Cross tabulation analysis between area (urban and rural) and increase in school attendance.**

		Increase in School attendance				
			Disagree	undecided	Agree	Total
Area	Jalpaiguri (Urban)	Count	20	4	56	80
		% within area	25	5	70	100
		% within Increase in School attendance	74.07	36.36	45.94	50
		% of Total	12.5	2.5	35	50
	Rajganj (Rural)	Count	7	7	66	80
		% within area	8.75	8.75	82.5	100
		% within Increase in School attendance	25.92	63.63	54.09	50
		% of Total	4.375	4.375	41.25	50
Total		Count	27	11	122	160
		% within area	16.87	6.87	76.25	100

Source-Field Survey

**Table 6.27 Chi square test to access the association between area (urban and rural) and increase in school attendance.**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.897 <sup>a</sup>	2	.009
Likelihood Ratio	8.176	2	.017
Linear-by-Linear Association	5.677	1	.017

From the above table, it is revealed chi-square is significant (Significant value is less than .05), hence rejecting the null hypothesis. It means there is a significant difference between the location of the school (rural and urban) and increase in attendance which has an overall impact on SSA. The conclusion can be drawn from the table is that attendance practice is different in the rural and urban area.

#### **Hypothesis 14**

**H0-** There is no significant association between the location of the schools (rural and urban) and teacher's opinion regarding the increase in study behaviour which has an overall impact on SSA.

**H1-** There is a significant association between the location of the schools (rural and urban) and teacher's opinion regarding the increase in study behaviour which has an overall impact on SSA.

**Table 6.28 Cross tabulation analysis between area (urban and rural) and increase in study behaviour**

Area		Increase in study behaviour			Total	
			Disagree	undecided		Agree
Area	Jalpaiguri (Urban)	Count	18	14	48	80
		% within Area	22.5	17.5	60	100
		% within increase in study behaviour	36.73	37.83	64.86	50
		% of Total	11.25	8.75	30	50
	Rajganj (Rural)	Count	31	23	26	80
		% within Area	38.75	28.75	32.5	100
		% within increase in study behaviour	63.26	62.162	35.13	50
		% of Total	19.37	14.37	16.25	50
Total	Count	49	37	74	160	

Source-Field Survey

**Table 6.29 Chi square tests to access the association between area (urban and rural) and increase in study behaviour.**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.179 <sup>a</sup>	2	.002
Likelihood Ratio	12.342	2	.002
Linear-by-Linear Association	10.222	1	.001
N of Valid Cases	160		

From the above table, it is revealed that chi-square value is significant as the significance value is less than 0.05, hence null hypotheses is rejected. It means there is a significant association between the location of the schools (rural and urban) and teacher's opinion regarding increasing in study behaviour of the students which has an overall impact on SSA. The inference from the above chi-square test reveals that study behaviour of the students is dependent on the location of the schools.

### Hypothesis 15

**H0-**There is no significant association between the location of the schools (rural and urban) and teacher's opinion regarding the quantity of MDM served in the school which has an overall impact on SSA.

**H1-** There is no significant association between the location of the schools (rural and urban) and teacher's opinion regarding the quantity of MDM served in the school which has an overall impact on SSA.

**Table 6.30 Cross tabulation analysis between area (urban and rural) and sufficient quantity of MDM**

Area		Sufficiency of MDM			Total
		Count	Disagree	undecided	
Jalpaiguri (Urban)	Count	3	18	59	80
	% within area	3.75	22.50	73.75	100
	% within Quantity of MDM sufficient	21.43	66.67	49.58	50
	% of Total	1.88	11.25	36.88	50
Rajganj (Rural)	Count	11	9	60	80
	% within area	13.75	11.25	75.00	100
	% within quantity of MDM sufficient	78.57	33.33	50.42	50
	% of Total	6.88	5.63	37.50	50
Total	Count	14	27	119	160

Source-Field Survey

**Table 6.31 Chi square tests to access the association between area (urban and rural) and sufficient quantity of MDM**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.580 <sup>a</sup>	2	.023
Likelihood Ratio	7.926	2	.019
Linear-by-Linear Association	.760	1	.383
N of Valid Cases	160		

From the above table, it is revealed chi-square is significant (Significant value is less than .05), hence rejecting a null hypothesis. It means there is a significant association between the location of the schools (rural and urban) and teacher's opinion regarding the quantity of MDM served in the school which has an overall impact on SSA. The inference from the above chi-square test reveals that quantities of MDM served in the schools are dependent on the location of the schools.

**Hypothesis 16**

**H1-**There is no significant difference between the location of the schools (rural and urban) and teacher's opinion regarding the increase in girls enrolment which has an overall impact on SSA.

**H0-** There is a significant difference between the location of the schools (rural and urban) and teacher's opinion regarding the increase in girls' enrolment which has an overall impact on SSA

**Table 6.32 Cross tabulation analysis between area (urban and rural) and increase in girl's enrolment**

		Increase in girl's enrolment				
			Disagree	undecided	Agree	Total
Area	Jalpaiguri (Urban)	Count	9	7	64	80
		% within area	11.25	8.75	80	100
		% within Increase in girls enrolment	52.94	46.66	50	50
		% of Total	5.625	4.375	40	50
	Rajganj (Rural)	Count	4	9	67	80
		% within area	5	11.2	83.8	100
		% within Increase in girls enrolment	30.8	56.2	51.1	50
		% of Total	2.5	5.6	41.9	50
Total	Count	17	15	128	160	

Source-Field Survey

**Table 6.33 Chi square tests to access the association between area (urban and rural) and increase in girl's enrolment.**

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.242 <sup>a</sup>	2	.326
Likelihood Ratio	2.293	2	.318
Linear-by-Linear Association	1.116	1	.291
N of Valid Cases	160		

From the above table, it is revealed that chi-square value is not significant as the significance value is higher than 0.05, hence null hypotheses is accepted. It means there is no significant association between the location of the schools (rural and urban) and teacher's opinion regarding the increase in girls' enrolment which has an overall impact on SSA. The inference from the above chi-square test reveals that girls' enrolment is not dependent on the location of the schools.

### **Hypothesis 17**

**H0-**There is no significant association between the location of the schools (rural and urban) and teacher's opinion regarding the quality of MDM served in the school which has an overall impact on SSA.

**H1-** There is a significant association between the location of the schools (rural and urban) and teacher's opinion regarding the quality of MDM served in the school which has an overall impact on SSA.

**Table 6.34 Cross tabulation analysis between area (urban and rural) and quality of MDM served in the school**

		Quality of MDM sufficient	Disagree	undecided	Agree	Total
Area	Jalpaiguri (urban)	Count	11	9	60	80
		% within Area	13.80%	11.20%	75.00%	100.00%
		% within Quality of MDM sufficient	64.70%	69.20%	46.20%	50.00%
	Rajganj (Rural)	Count	6	4	70	80
		% within Area	7.50%	5.00%	87.50%	100.00%
		% within Quality of MDM sufficient	35.30%	30.80%	53.80%	50.00%
Total		Count	17	13	130	160

Source-Field Survey

**Table 6.35 Chi square tests to access the association between area (urban and rural) and quality of MDM served in the school.**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.163 <sup>a</sup>	2	.125
Likelihood Ratio	4.236	2	.120
Linear-by-Linear Association	3.328	1	.068
N of Valid Cases	160		

From the above table, it is revealed chi-square is significant (Significant value is more than .05), hence accepting the null hypothesis. It means there is no significant association between the location of the schools (rural and urban) and teacher's opinion regarding the quality of MDM served in the school which has an overall impact on SSA.

### Hypothesis 18

**H0-**There is no significant association between the location of the schools (rural and urban) and teacher’s opinion regarding the sufficiency of education and nutritional effect of MDM which has an overall impact on SSA.

**H1-**There is a significant association between the location of the schools (rural and urban) and teacher’s opinion regarding the sufficiency of education and nutritional effect of MDM which has an overall impact on SSA.

**Table 6.36 Cross tabulation analysis between area (urban and rural) and sufficiency of nutritional & educational effects of MDM served in the school**

		Nutritional and education is sufficient				Total
			Disagree	undecided	Agree	
Area	Jalpaiguri (Urban)	Count	9	5	66	80
		% within area	11.20%	6.20%	82.50%	100.00%
		% within Nutritional and education is sufficient	69.20%	55.60%	47.80%	50.00%
		% of Total	5.60%	3.10%	41.20%	50.00%
	Rajganj (Rural)	Count	4	4	72	80
		% within area	5.00%	5.00%	90.00%	100.00%
		% within Nutritional and education is sufficient	30.80%	44.40%	52.20%	50.00%
		% of Total	2.50%	2.50%	45.00%	50.00%
Total		Count	13	9	138	160

Source-Field Survey

**Table 6.37 Chi square tests to access the association between area (urban and rural) and sufficiency of nutritional and educational effects.**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.295 <sup>a</sup>	2	.317
Likelihood Ratio	2.346	2	.309
Linear-by-Linear Association	2.254	1	.133
N of Valid Cases	160		

From the above table, it is revealed that chi-square value is not significant as the significance value is higher than 0.05, hence null hypotheses is accepted. It means there is no significant association between the location of the schools (rural and urban) and teacher’s opinion regarding the sufficiency of education and nutritional effect of MDM which has an

overall impact on SSA. The inference from the above chi-square test reveals that education and nutritional support are not dependent on the location of the schools

### **6.5 Comparison of Enrolment, Drop out, attendance, improvement in study, quality and quantity of MDM, between Jalpaiguri municipality (Urban) and Rajganj block (rural) according to perception of teachers.**

It is considered essential to see whether the group of teachers in the two sample area significantly differed or not on six variables. Therefore it is attempted to study the significance of difference between the mean performance of Jalpaiguri Municipality(Urban) and Rajganj (Rural) in enrolment, drop out, attendance, improvement in studies, quantity and quality of MDM served and regular inspection by authorities towards MDM effectiveness through testing the following hypotheses using Independent sample 't' test for significance of difference between the means and details are presented in the table

**Hypotheses 19** –There is no significant difference for improvement in enrolment after implementation of MDM scheme between Jalpaiguri Municipality(Urban) and Rajganj(Rural)

**Hypothesis 20** -There is no significant difference for reduction in drop out after implementation of mid-day meal scheme between Jalpaiguri Municipality (urban) and Rajganj (rural)

**Hypothesis 20-** There is no significant difference in the responses teachers for improvement in school attendance after implementation of MDM scheme between Jalpaiguri Municipality (Urban) and Rajganj (rural)

**Hypothesis 22-**There is no significant difference in the responses teachers for improvement in study after implementation of MDM scheme between Jalpaiguri Municipality (urban) and Rajganj (Rural)

**Hypothesis 23-**There is no significant difference in the responses teachers for the quality of MDM served between Jalpaiguri Municipality (urban) and Rajganj block(rural)

**Hypothesis 24-** There is no significant difference in the responses teachers for an increase in girls enrolment after implementation of MDM between Jalpaiguri Municipality (urban) and Rajganj block (rural)

**Hypothesis25 -** There is no significant difference in the responses teachers for the quantity of MDM served between Jalpaiguri Municipality (urban) and Rajganj block(rural)

**Hypothesis 26 -** There is no significant difference in responses teachers for sufficiency of education and Nutrition after implementation of MDM between Jalpaiguri Municipality(Urban) and Rajganj Block (Rural)

**Table 6.38 Details of ‘t’test for difference in enrolment, Drop out, attendance, improvement in study, quality and quantity of MDM served between Jalpaiguri Municipality (Urban) and Rajganj (rural)**

Hypothesis number	Variables	Group Statistics				t value	p value
		Area	N	Mean	Std. Deviation		
19	Increase in enrolment	Jalpaiguri (Urban)	80.00	1.98	0.97	5.223	0.000(HS)
		Rajganj (Rural)	80.00	2.68	0.71		
20	reduction in drop out	Jalpaiguri (Urban)	80.00	2.58	0.69	1.602	0.111(NS)
		Rajganj (Rural)	80.00	2.74	0.59		
21	Increase in School attendance	Jalpaiguri (Urban)	80.00	2.45	0.87	2.419	0.017(HS)
		Rajganj (Rural)	80.00	2.74	0.61		
22	Increase in study behaviour	Jalpaiguri (Urban)	80.00	2.35	0.86	1.211	0.001(HS)
		Rajganj (Rural)	80.00	1.93	0.84		
23	Quantity of MDM sufficient	Jalpaiguri (Urban)	80.00	2.70	0.53	0.871	0.385(NS)
		Rajganj (Rural)	80.00	2.61	0.72		
24	Increase in girls enrolment	Jalpaiguri (Urban)	80.00	2.69	0.67	1.05	0.292(NS)
		Rajganj (Rural)	80.00	2.78	0.52		
25	Quality of MDM satisfactory	Jalpaiguri (Urban)	80.00	2.61	0.72	1.838	0.068(NS)
		Rajganj (Rural)	80.00	2.80	0.56		
26	Nutritional and education is satisfactory	Jalpaiguri (Urban)	80.00	2.712	0.66	1.507	0.134(NS)
		Rajganj (Rural)	80.00	2.852	0.47		

Note-HS-Highly Significant-Significant ,NS- Non Significant at 0.05 leve

### 6.5.1 Results of hypothesis

**Hypothesis 19**-the p-value is less than 0.05; the null hypothesis is rejected at 5% level of significance concerning improvement in enrolment. Hence there is There is a significant difference for improvement in enrolment after implementation of MDM scheme between Jalpaiguri Municipality(Urban) and Rajganj(Rural).based on the mean score it is found that mean value of the improvement in enrolment of in Jalpaiguri 1.937, and that of Rajganj is 2.68. It means that Rajganj has higher enrolment than Jalpaiguri Municipality.

**Hypothesis 20**- the p-value is greater than 0.05, the null hypothesis is accepted at 5% level of significance concerning reduction in drop out. Hence there is no significant difference with regard to reduction in drop out .based on the mean score, Jalpaiguri municipality has a lower reduction in drop out (2.58 ) than Rajganj.

**Hypothesis 21**-- the p-value is less than 0.05; the null hypothesis is rejected at 5% level significance with regard to improvement in school attendance. Hence there is a significant difference with regard to improvement in school attendance. Based on the mean score, Rajgunj block (2.74) have higher improvement in attendance than Jalpaiguri Municipality.

**Hypothesis 22** – here the p-value is less than 0.05, the null hypotheses is rejected at 5% significance level with regard to improvement in the study. Hence, there is There is a significant difference in the responses teachers for improvement in study after implementation of MDM scheme between Jalpaiguri Municipality (urban) and Rajganj (Rural)

**Hypothesis 23-** here the p-value is more than 0.05, the null hypothesis is accepted at 5% significance level concerning the quantity of MDM served in the school. Hence there is There is no significant difference in the responses teachers for the quantity of MDM served between Jalpaiguri Municipality (urban) and Rajganj block(rural)

**Hypothesis 24-**It is revealed that p-value is more significant than 0.05, null hypothesis is accepted at 0.05 level of significance concerning the increase in girls enrolment (0.162)t after the implementation of MDM. Hence it is concluded that There is no significant difference in the responses teachers for an increase in girls enrolment after implementation of MDM between Jalpaiguri Municipality (urban) and Rajganj block(rural)

**Hypothesis 25-**The p-value here the p-value is more than 0.05, the null hypothesis is accepted at 5% significance level concerning the quality of MDM served in the school. Hence there is no significant difference in the responses teachers for the quality of MDM served between Jalpaiguri Municipality (urban) and Rajganj block(rural)

**Hypothesis 26-** The p-value is greater s than 0.05, the null hypothesis is accepted at 5% level of significance with regard to education and nutrition provision .hence there is no significant difference with regard to education and nutritional support

## 6.6 Regression Analysis: Measuring Students’ satisfaction in Mid Day Meal in Jalpaiguri

Table 6.39 Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.484 <sup>a</sup>	.235	.217	.81436
a. Predictors: (Constant), Going to school Empty stomach, Mid day meal provided timely, feeling full stomach after MDM, Taste of the food				

The above regression table 6.39 summarises the model performances where R represents the multiple correlation coefficient with a range lies between -1 and +1. The R-value is 0.484, and it means enhancing students' satisfaction in MDM has a positive relationship with an empty stomach, timely delivery, feeling of full stomach and taste of the food.

R square represents the coefficient of determination and ranges between 0, and 1. Since R square value is 0.235, 23.5 percent of the variation in enhancing students' participation in MDM by an empty stomach, timely delivery, feeling of a full stomach after MDM and taste of the food.

<b>Table 6.40 ANOVA<sup>b</sup></b>						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.587	4	8.897	13.415	.000 <sup>a</sup>
	Residual	116.057	175	.663		
	Total	151.644	179			
a. Predictors: (Constant), Going to school Empty stomach, Mid day meal provided timely, feeling full stomach after MDM, Taste of the food						
b. Dependent Variable: satisfaction in MDM						

From the ANOVA table 6.40 F value is significant (significant value is less than 0.05) it means dependent variable is more reliable. The following table 6.40 shows the results of multiple regressions predicting the factors having a significant impact on dependent variable

<b>Table 6.41 Coefficients</b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.945	.449		4.332	.000
	Taste of the food	.273	.099	.236	2.762	.006
	Feeling full stomach after MDM	.214	.103	.174	2.077	.039
	Mid day meal provided timely	.247	.093	.176	2.645	.009
	Going to school Empty stomach	-.162	.062	-.177	-2.630	.005
a. Dependent Variable: satisfaction in MDM						

### **6.6.1 Analysis of Regression Result (Urban-Jalpaiguri)**

#### **Hypothesis 27**

H0- Taste of the food has no significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri

H1- Taste of the food has a significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri

Thus, the null hypothesis 27 is rejected as the p-value is 0.006 which is less than 0.05. Hence the taste of the food has a significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri

#### **Hypothesis 28**

H0 Feeling of the full stomach has no significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri

H1 Feeling of the full stomach a significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri.

Thus, the null hypothesis 26 is rejected as the p-value is 0.039 which is less than 0.05. Hence, the feeling of the full stomach a significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri.

#### **Hypothesis 29**

H0 Timely delivery of MDM in the schools has no significant impact on an overall enhancement student satisfaction in mid-day meal in Jalpaiguri.

H1 Timely delivery of MDM in the schools has a significant impact on an overall enhancement student satisfaction in mid-day meal in Jalpaiguri

Thus, the null hypothesis 27 could be rejected as the p-value is 0.009 which is less than 0.05. Hence, timely delivery of MDM has a positive impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri.

#### **Hypothesis 30**

H0 Empty stomach has no significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri.

H1 Empty stomach has a significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri

For hypotheses 28, the null hypothesis is rejected as the p-value is 0.005 which is less than 0.05. Hence empty stomach has a significant negative impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri.

### 6.6.2 The Regression model

The above regression model coefficient table discloses that coefficients for the taste of the food, feeling full stomach after MDM, provision of MDM timely helps for enhancing student satisfaction in MDM but coefficient for empty stomach have the negative impact on for enhancing student participation in MDM

The regression Equation can be written as follows

$$Y_j = 1.945 + 0.236X_{j1} + 0.174X_{j2} + 0.176X_{j3} - 0.177X_{j4}$$

$Y_j$  = Students' satisfaction in Mid Day Meal in Jalpaiguri,  $X_{j1}$  = taste of the MDM,  $X_{j2}$  = Feeling of full stomach after MDM,  $X_{j3}$  = Timely delivery of MDM in the schools,  $X_{j4}$  = Empty stomach

### 6.7 Regression Analysis: Measuring Students' satisfaction in Mid Day Meal in Rajganj

Table 6.42 Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710 <sup>a</sup>	.504	.493	.74157
a. Predictors: (Constant), Going to school Empty stomach, Do you feel full stomach after MDM?, Mid day meal provided timely, Taste of the food				

The above regression table 6.42 summarises the model performances where R represents the multiple correlation coefficient with a range lies between -1 and +1. As The R value is 0.710, it means enhancing students' performance in MDM has a positive relationship with the empty stomach, timely delivery of mid-day meal, feeling of the full stomach after MDM and taste of the food. R square represents the coefficient of determination and ranges between 0, and 1. Since R square value is 0.504, 50.4 per cent of the variation in enhancing students' participation in MDM by the empty stomach, timely delivery of MDM, feeling of the full stomach after MDM and taste of the food.

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	97.956	4	24.489	44.531	.000 <sup>a</sup>
	Residual	96.238	175	.550		
	Total	194.194	179			
a. Predictors: (Constant), Going to school Empty stomach, feeling full stomach after MDM, timely delivery of MDM, Taste of the food						
b. Dependent Variable: satisfaction in MDM						

From the ANOVA table 6.43 F value is significant (significant value is less than 0.05) it means dependent variable is more reliable.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.822	.256		3.212	.002
	Taste of the food	.431	.075	.439	5.734	.000
	Do you feel full stomach after MDM?	.257	.096	.209	2.685	.008
	Mid day meal provided timely	.160	.069	.142	2.323	.021
	Going to school Empty stomach	.079	.072	.067	1.101	.272
a. Dependent Variable: satisfaction in MDM						

The above table 6.44 shows the results of multiple regressions predicting the factors having a significant impact on dependent variable.

### **6.7.1 Analysis of Regression Results (Rural- Rajganj)**

#### **Hypothesis 31**

H<sub>0</sub> Taste of the food has no significant impact on overall enhancement student satisfaction in mid-day meal in Rajganj

H1 Taste of the food has a significant impact on overall enhancement student satisfaction in mid-day meal in Rajganj.

For hypothesis 29, the null hypothesis is rejected as the p-value is 0.000 which is less than 0.05. Hence the taste of the food a significant impact on overall enhancement of satisfaction in mid-day meal in Rajganj.

### **Hypothesis 32**

H0 Feeling of the full stomach has no significant impact on overall enhancement student satisfaction in mid-day meal in Rajganj.

Ha Feeling of the full stomach a significant impact on overall enhancement student satisfaction in mid-day meal in Rajganj.

For hypothesis 30, the null hypothesis is rejected as the p-value is 0.008 which is less than 0.05. Hence, the feeling of the full stomach has a positive impact on overall enhancement student satisfaction in mid-day meal in Rajganj

### **Hypothesis 33**

H0 Timely delivery of MDM in the schools has no significant impact on overall enhancement student satisfaction in mid-day meal in Rajganj.

H1 Timely delivery of MDM in the schools has a significant impact on an overall enhancement student satisfaction in mid-day meal in Rajganj

For hypothesis 31, The null hypothesis is rejected as the p-value is 0.021 which is less than 0.05. Hence, timely delivery of MDM has a significant impact on overall enhancement student satisfaction in mid-day meal in Rajganj.

### **Hypothesis 34**

H0 Empty stomach has no significant impact on overall enhancement student satisfaction in mid-day meal in Rajganj.

H1 Empty stomach has a significant impact on overall enhancement student satisfaction in mid-day meal in Rajganj

For hypothesis 32, the null hypothesis is accepted as the p-value is 0.272 which is more than 0.05. Hence empty stomach has no significant impact on overall enhancement student satisfaction in mid-day meal in Jalpaiguri

### 6.7.2 The Regression Model

The above regression model coefficient table discloses that coefficients for a taste of the food, feeling full stomach, timely delivery of MDM and empty stomach helps for enhancing student participation in MDM. The regression Equation can be written as follows

$$Y_i = 0.822 + 0.439X_{r1} + 0.209X_{r2} + 0.142X_{r3} + 0.067X_{r4}$$

$Y_j$  = Students' satisfaction in Mid Day Meal in Rajgunj,  $X_{r1}$  = taste of the MDM,  $X_{r2}$  = Feeling of full stomach after MDM,  $X_{r3}$  = Timely delivery of MDM in the schools,  $X_{r4}$  = Empty stomach

### 6.8 Regression Analysis: Hygiene of Mid Day Meal (Jalpaiguri)

Table 6.45 Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.742 <sup>a</sup>	.551	.538	.82393
a. Predictors: (Constant), cleanness and adequacy of kitchen, , health problems, washing hands, drinking water, cleanness of dining area				
Dependent Variable: Hygiene of MDM				

The above regression table 6.45 summarises the model performances where R represents the multiple correlation coefficient with a range lies between -1 and +1. As The R value is 0.742, it means hygienic midday meal (served) has a positive relationship between cleanness and adequacy of the kitchen, health problems, school, washing hands, drinking waters, cleanness of dining area. R square represents the coefficient of determination and ranges between 0, and 1. Since R square value is 0.551, 55.1% of the variation in the hygiene of MDM by cleanness and adequacy of the kitchen, health problems, school, washing hands, drinking waters, cleanness of dining area

Table 6.46 ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	144.828	5	28.966	42.668	.000 <sup>a</sup>
	Residual	118.122	174	.679		
	Total	262.950	179			
a. Predictors: (Constant), cleanness and adequacy of kitchen, , health problems, school, washing hands, drinking waters, cleanness of dining area						

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	144.828	5	28.966	42.668	.000 <sup>a</sup>
	Residual	118.122	174	.679		
	Total	262.950	179			
a. Predictors: (Constant), cleanness and adequacy of kitchen, , health problems, school, washing hands, drinking waters, cleanness of dining area						
b. Dependent Variable: Hygiene of MDM						

From the ANOVA table 6.46 ,F value is significant (significant value is less than 0.05) it means dependent variable is more reliable. The following table shows the result of multiple regression predicting the factors having a significant impact on dependent variable.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
		1	(Constant)	1.236		
Cleanness of Dining area	.344		.070	.337	4.930	.000
drinking water facilities	.211		.081	.162	2.598	.010
Illness	-.462		.079	-.308	-5.861	.000
washing hands	.156		.067	.128	2.319	.022
Cleanness of kitchen store	.245		.077	.203	3.167	.002
a. Dependent Variable: Hygiene of MDM						

### 6.8.1 Analysis of Regression Results (urban-Jalpaiguri)

The hypotheses were tested through statistical analysis given in **Table 6.47**

#### Hypothesis 35

H0 The cleanness of the dining area has no significant impact on the hygiene of MDM in Jalpaiguri.

H1 The cleanness of the dining area has no significant impact on the hygiene of MDM in Jalpaiguri

For hypothesis 33, the null hypothesis is rejected as the p-value is 0.000 which is less than 0.05. Hence the cleanness of the dining area has a significant impact on the hygiene of MDM.

### **Hypothesis 36**

H0 The provision of drinking water facilities have no significant impact on the hygiene of MDM.

H1 The provision of drinking water facilities have a significant impact on the hygiene of MDM

For hypothesis 34, the null hypothesis is rejected as the p-value is 0.010 which is less than 0.05. Hence The provision of drinking water facilities has a significant impact on the hygiene of MDM in Jalpaiguri.

### **Hypothesis 37**

H0 Illness or health problems have no significant impact on the hygiene of MDM

H1 Illness or health problems have a significant impact on the hygiene of MDM

For hypothesis 35, the null hypothesis is rejected as the p-value is 0.000 which is less than 0.05. Hence, illness has a significant negative impact on the hygiene of MDM in Jalpaiguri.

### **Hypothesis 38**

H0 Provision of washing hands has no significant impact on the hygiene of MDM in Jalpaiguri

H1 Provision of washing hands has a significant impact on the hygiene of MDM in Jalpaiguri

For hypothesis 36, the null hypothesis is rejected as the p-value is 0.022 which is less than 0.05. Hence, Provision of washing hands has a significant impact on MDM in Jalpaiguri.

### **Hypothesis 39**

H0 The cleanness and adequacy of kitchen store have no significant impact on the hygiene of MDM in Jalpaiguri.

H1 The cleanness and adequacy of kitchen store have a significant impact on the hygiene of MDM in Jalpaiguri.

For hypotheses 37, the null hypothesis is rejected as the p-value is 0.002 which is less than 0.05. Hence, cleanness and adequacy of kitchen store have a significant impact on the hygiene of MDM in Jalpaiguri.

## **6.8.2 Regression Model**

The above regression model coefficient table 6.46 discloses that coefficients for cleanness and adequacy of the kitchen, health problems, washing hands, drinking waters, and cleanness

of the dining area help to increase the hygiene of MDM. The regression Equation can be written as follows

$$Y_{jh}=1.236+0.337X_{jh1}+0.162X_{jh2}-0.308X_{jh3}+0.128X_{jh4}+0.203X_{jh5}$$

$Y_{jh}$ =Hygiene of MDM in Jalpaiguri,  $X_{jh1}$ =cleanness of dining area, $X_{jh2}$ =drinking water, $X_{jh3}$ =illness, $X_{jh4}$ =washing hands,  $X_{jh5}$ =Cleanness of kitchen store

### 6.9 Regression Analysis: Hygiene of Mid Day Meal (Rajganj)

Table 6.48 Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802 <sup>a</sup>	.644	.634	.72241
a. . Predictors: (Constant), cleanness and adequacy of kitchen, , health problems, school, washing hands, drinking waters, cleanness of dining area Dependent Variable- Hygiene of MDM				

The above regression table 6.48 summarises the model performances where R represents the multiple correlation coefficient with a range lies between -1 and +1. As The R value is 0.802, it means hygienic midday meal (served) has a positive relationship between cleanness and adequacy of the kitchen, health problems, school, washing hands, drinking waters, cleanness of dining area R square represents the coefficient of determination and ranges between 0, and 1. Since R square value is 0.644, 64.4 per cent of the variation in the hygiene of MDM by cleanness and adequacy of the kitchen, health problems, school, washing hands, drinking waters, cleanness of dining area.

Table 6.49 ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	164.145	5	32.829	62.907	.000 <sup>a</sup>
	Residual	90.805	174	.522		
	Total	254.950	179			
a. Predictors: (Constant), cleanness and adequacy of kitchen, , health problems, school, washing hands, drinking waters, cleanness of dining area b. Dependent Variable: Hygiene of MDM						

From the ANOVA table 6.49, F value is significant (significant value is less than 0.05) it means dependent variable is more reliable. The following table shows the result of multiple regressions predicting the factors having a significant impact on dependent variable.

Table 6.50 Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.550	.243		2.260	.025
	Cleanness of Dining area	.369	.059	.404	6.213	.000
	drinking water facilities	.151	.062	.149	2.434	.016
	Illness/ health problem	-.089	.063	-.067	-1.403	.162
	washing hands	.114	.058	.096	1.957	.032
	Cleanness of kitchen store	.365	.081	.305	4.501	.000
a. Dependent Variable: The midday meal served to you is hygienic						

The hypotheses were tested through statistical analysis given in Table 6.50

### 6.9.1 Analysis of Regression Results (Rural –Rajganj)

#### Hypothesis 40

H0 The cleanness of the dining area has no significant impact on the hygiene of MDM.

H1 The cleanness of the dining area has a significant impact on the hygiene of MDM.

For hypothesis 38, the null hypothesis is rejected as the p-value is 0.000 which is less than 0.05. Hence the cleanness of the dining area has a significant impact on the hygiene of MDM.

#### Hypothesis 41

H0 The provision of drinking water facilities have no significant impact on the hygiene of MDM in Rajganj

H1 The provision of drinking water facilities have a significant impact on the hygiene of MDM in Rajganj.

For hypothesis 39, the null hypothesis is rejected as the p-value is 0.036 which is less than 0.05. Hence The provision of drinking water facilities has a significant impact on the hygiene of MDM in Rajganj.

#### Hypothesis 42

H0 Illness has no significant impact on the hygiene of MDM in Rajganj.

H1 Illness has a significant impact on the hygiene of MDM in Rajganj.

For hypothesis 40 , the null hypothesis is accepted as the p-value is 0.162 which is more than 0.05. Hence, illness have no significant impact on the hygiene of MDM and

**Hypothesis 43**

H0 Provision of washing hands has no significant impact on the hygiene of MDM

H1 Provision of washing hands has a significant effect on the hygiene of MDM

For hypothesis 41, the null hypothesis is rejected as the p-value is 0.032 which is less than 0.05. Hence, Provision of washing hands has a significant impact on the hygiene of MDM in Jalpaiguri.

**Hypothesis 44**

H0 The cleanness of the kitchen store has no significant impact on the hygiene of MDM in Rajganj.

H1 The cleanness and adequacy of kitchen store have a significant impact on the hygiene of MDM in Rajganj

For hypothesis 42, the null hypothesis is rejected as the p-value is 0.001 which is less than 0.05. Hence, cleanness and adequacy of kitchen store have a significant impact on the hygiene of MDM in Rajganj.

**6.9.2 Regression Model**

The above regression model coefficient table 6.49 discloses that coefficients for cleanness and adequacy of the kitchen, health problems, washing hands, drinking waters, and cleanness of the dining area help to increase the hygiene of MDM. The regression Equation can be written as follows

The regression Equation can be written as follows

$$Y_{rh}=0.550+0.404X_{rh1}+0.149X_{rh2}-0.067X_{rh3}+0.096X_{rh4}+0.305X_{rh5}$$

## Chapter-VII

# **Impact of Civil Works inSSA:**

## **Responses of the**

## **Head –Teachers / Teacher in charge and students**

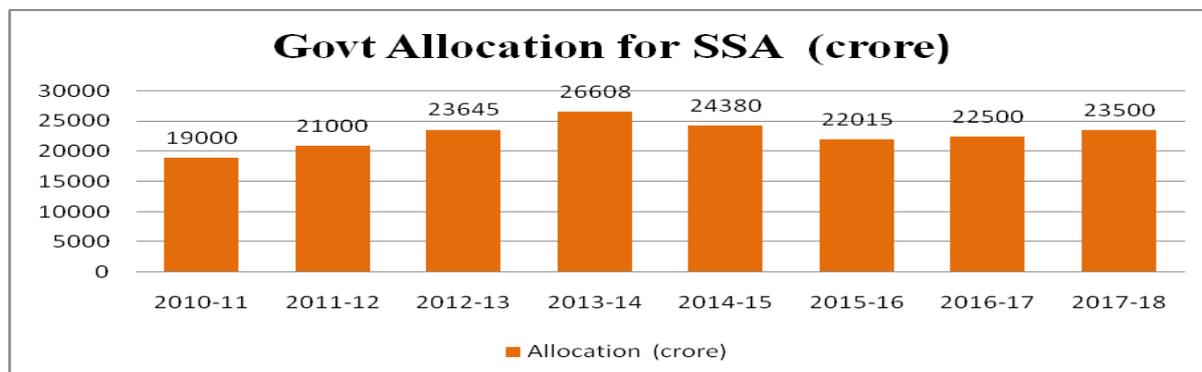
## Chapter-VII

### **Impact of Civil Works in SSA: Responses of the Head –Teachers / Teacher in charge and students**

#### **7.1 Introduction**

Discrimination in social and economic progress in any civilised society could be cracked by education. Education helps to develop functional & analytical ability for individuals'. Involvement in education does not only increase the efficiency, it also helps to lead a quality and individual, societal life. Elementary education is the base of our education system. During this elementary period, students are encouraged to think independently and to develop fundamental values of social life. To achieve this, Government of India made a constitutional right to provide free and compulsory education to all children until the age of 14 in the year 1950. This policy was strengthened by the direct involvement of the Central Govt. through Sarva Shiksha Abhiyan (SSA) in the year 2001. But, of course, State Government also played a very significant role in respect of sharing financial expenditure and implementing education goals under SSA. The government of India allotted 69,937 crores in F.Y 2012-13, and the student allocation was fixed at Rs.5,592 per annum. Recently, Government of India has introduced Prarambhik Shiksha Kosh (PSK) @ 2% as education cess on the tax liability of the taxpayers to raise finance in respect of elementary education. Due to the introduction of PSK, SSA financing has improved from 50% (2010-11) to 62% (2017-18). However, there is a gap between the estimation of funds and fund received by SSA. In the financial year 2016-17, SSA received only Rs.22,500 crore against the estimated demand of Rs.55,000 crore. There are also significant differences in the expenditure by the state across India. Himachal Pradesh and Gujarat spent 90% of their total SSA grant whereas West Bengal spent only 40% of the approved budget

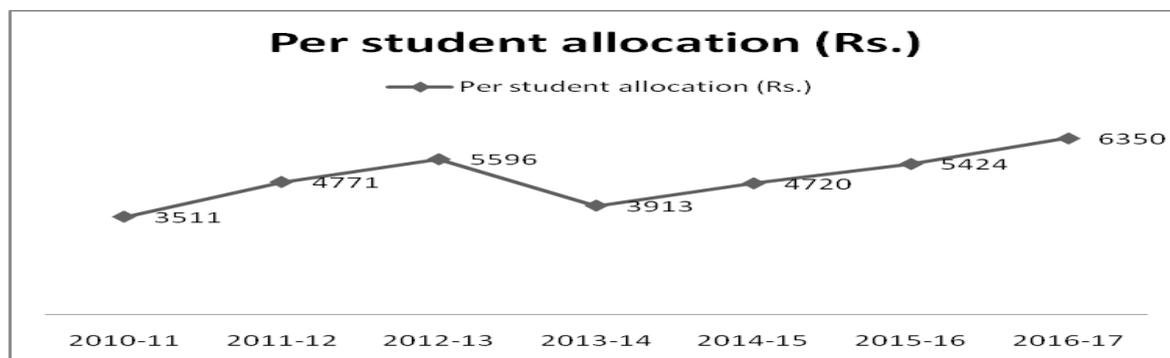
**Figure -7.1 Government allocation for SSA from 2010 to 2018**



Source: Union Expenditure Budget, Vol. 2, 2010-11 to 2017-18. Available online at: [www.indiabudget.nic.in](http://www.indiabudget.nic.in).  
 Note: All figures are in rupees crore and include the North East component. Figures up to 2016-17 are revised estimates. For 2017-18, budget estimates are used. Last accessed on 1 February, 2017.

It is also observed that per student allocation have increased since FY 2013-14 due to an increase of 2% drop of enrolment in Govt schools. Per student allocation is determined by dividing total budget allocation by number of students enrolled in Government schools.

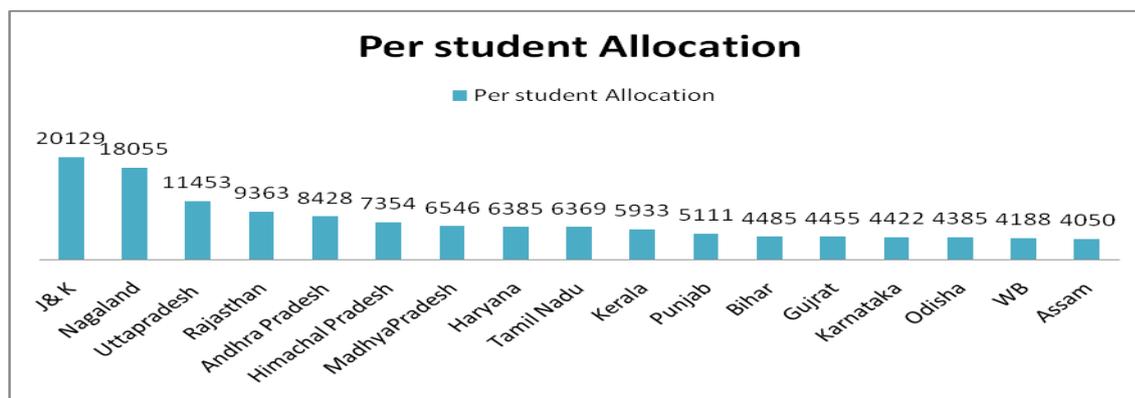
**Figure -7.2 Per student allocation form 2010 to 2017**



Source: Joint Review Mission report

From the JRM, it was found that Delhi and Jharkhand were the lowest per-student allocation and Jammu Kashmir was the highest per-student allocation (Rs.20,129 for F.Y 2016-17)

**Figure- 7.3 per student allocation state wise**



Source: 'District Information System for Education' (DISE), National University of Educational Planning and Administration (NUEPA). For 2016-17,

The amount of money spent on infrastructure stipulated in SSA budget to 30 per cent of total SSA budget and West Bengal allotted 18 per cent of the total SSA budget to the infrastructure and spent 90 per cent of its allocation in the year 2013-14. Infrastructure resources are prerequisite to providing quality learning. For this Operational Blackboard was introduced to provide minimum basic facilities in the schools as per National Education Policy, 1986. The success of the schools were evaluated by some quantitative measures or basic facilities in the schools. The minimum basic facilities like the school building, drinking water facilities, girls' toilet, electricity are required for enhancing the learning environment of the school and also to the universalisation of elementary education (UEE).

In this context of elementary education in Jalpaiguri, the need for evaluation of civil works is much more important. Undoubtedly school environment has a significant impact on quality teaching and learning procedure and school environment depends on some basic facilities and it includes school building, drinking water facility, girl's toilet, electricity, boundary wall, playground, library sports facilities, classrooms. As a part of the nationwide programme, the Sarva Shiksha mission, Jalpaiguri District is trying to achieve the goal of Education. The infrastructural development of educational institutions making the students school-centric and educated. A large variety of civil works is taken up under the SSA. Involvement of the community is a unique feature of school Infrastructure Development taken up under SSA in Jalpaiguri. The Village Education Committee (VEC), Ward Education Committee (WEC), and the Managing Committee (MC) are the implementing body for this development. This process generates a sense of ownership among the communities.

## **7.2 Objectives:**

The present study assesses

- i) The drinking water facilities in the schools
- ii) Sanitation and toilet facilities
- iii) Status of school building and it includes
  - a) Furniture for students
  - b) Classrooms in good conditions out of total class rooms
  - c) Classroom require major repair
  - d) Play ground facility
  - e) Availability of computers
  - f) Medical check up of students
- iv) Ramp for disabled students
- v) Provision for electricity

## **7.3 General Profile of Schools in the District**

As per record of Sarva Shiksha Mission (Annual Report 2013-14), Jalpaiguri District, there are 3157 Govt & Govt aided primary schools and 692 private primary schools. In Jalpaiguri Sadar, there are 278 primary schools and 257 primary schools in Rajganj block. For the present study, 40 schools were randomly selected of which were primary schools from each sample. This section is divided into two parts. The first part provides the general background of the schools and the second part deals with infrastructural development, i.e. civil works have so far done or undertaken by the schools out of financial support from Sarva Shiksha Abhiyan, Jalpaiguri district. At the same time, it is not possible to make any comparative study between the block due to information available from 80 schools, 40 each from each block

## **7.4 Provision of various types of civil works in Jalpaiguri Sadar and Rajganj**

Quality of school building and availability of other basic facilities is an essential factor of school access. The surrounding environment of the school has to be attractive and comfortable to

the child, so that child is motivated to enrol in and attend school regularly. The basic facilities are such as rooms, electricity, toilets, ramps. Handrails, boundary walls, are required to build a congenial atmosphere to promote elementary education in the Jalpaiguri. The details of various inputs which are provided to schools are listed below.

**Table 7.1 School related inputs**

SL. No	School related inputs	inputs
1		School building
2		Class Room For Teaching
3		Furniture For students
4		Class Room Require major Repair
5		Separate Room For HM
6		Electricity Connection
7		Boundary wall
8		Toilet Facility
9		CSWN Friendly Toilet
10		Drinking Water facility
11		Computer Aided learning lab
12		play Ground facility
13		Medical Check up of students
14		Ramp
15		Hand Rail

Source: Sarva Shiksha Abhiyan, MHRD, 2011

## **7.5 The extent to which the various civil work provisions (Input) provided in Primary schools in sample area.**

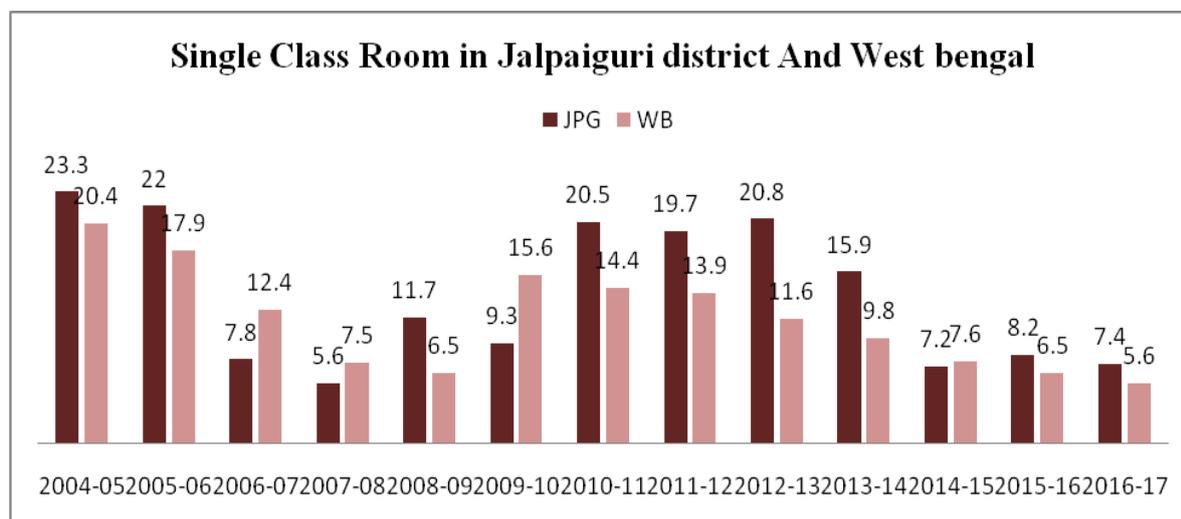
This section deals with analysis and interpretation of data concerning various civil work facilities provided in the schools. The civil works include school building, furniture for students, classroom require major repair, separate room for the head teacher, electricity connection, boundary wall, toilet facility, computer-aided learning laboratories, ramp, handrails. The analysis is discussed below:

### **7.5.1. School with Single class Room**

As per SSA norms for each primary schools, at least 2 classrooms with a verandah is required to support universalise of elementary education. The data regarding classrooms for the primary is as follows:

Jalpaiguri as a whole 7.4 per cent of the schools had single classrooms in 2016-17 while the ratio 23.5.percent in 2004-05. So, it was observed that 90 per cent of the school building is wholly pucca with the roof covered with tin shed.

**Figure 7.4 Percentage of schools with single class rooms from 2004 to 2017**



Source- DISE, (<http://udise.in/>)

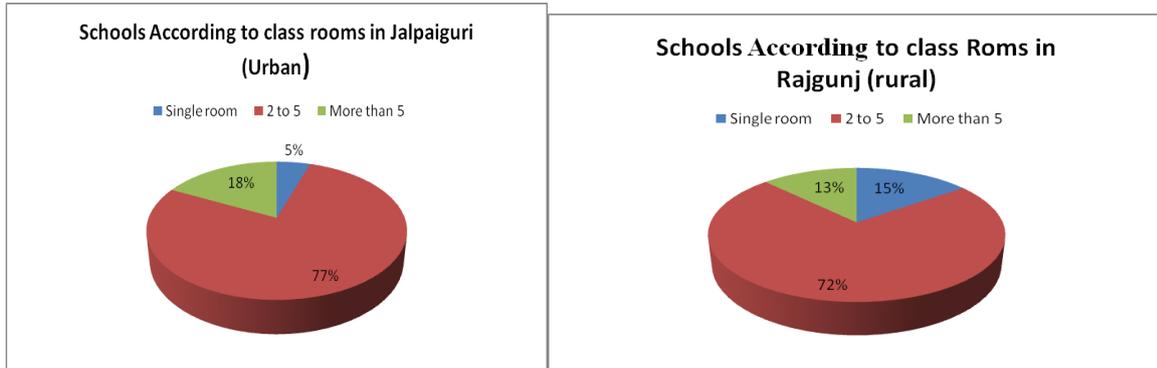
The single class room ratio in the district for the year 2004-5 near about 20.4 percent . However, an impressive decadal percentage was observed in 2006-07 and 2007-08 due to a higher rate of establishment of primary schools in the district. The percentage of schools that are single classrooms is also higher in Jalpaiguri district in comparison to West Bengal. In Jalpaiguri, 7.4 per cent of total schools were the single classroom, while in West Bengal, it was 5.6 per cent in 2016-17.

**Table 7.2 Status of schools with class rooms availability**

Sample Area	No. of rooms	No of schools	%
Jalpaiguri (urban)	Single room	2	5
	2 to 5	31	77.5
	More than 5	7	17.5
	Total	40	100
Rajganj (Rural)	Single room	6	15
	2 to 5	29	72.5
	More than 5	5	12.5
	Total	40	100

Source-Field Survey

**Figure 7.5 percentage of schools according to class rooms availability**



Source-Field Survey

In all 77 per cent schools in Jalpaiguri had the number of classrooms more than 5 as against 5 per cent (2) schools had categorically replied about their single class. From the table 7.2, it is evident that, out of 40 schools in Rajgunj, 6 (15 per cent) schools have been conducting classes in a single class. 72 per cent (29) schools had classrooms in between 2 to 5. From table 7.2, it is evident that the sample area of Jalpaiguri is still lower, but Rajganj sample area is higher of the district average.

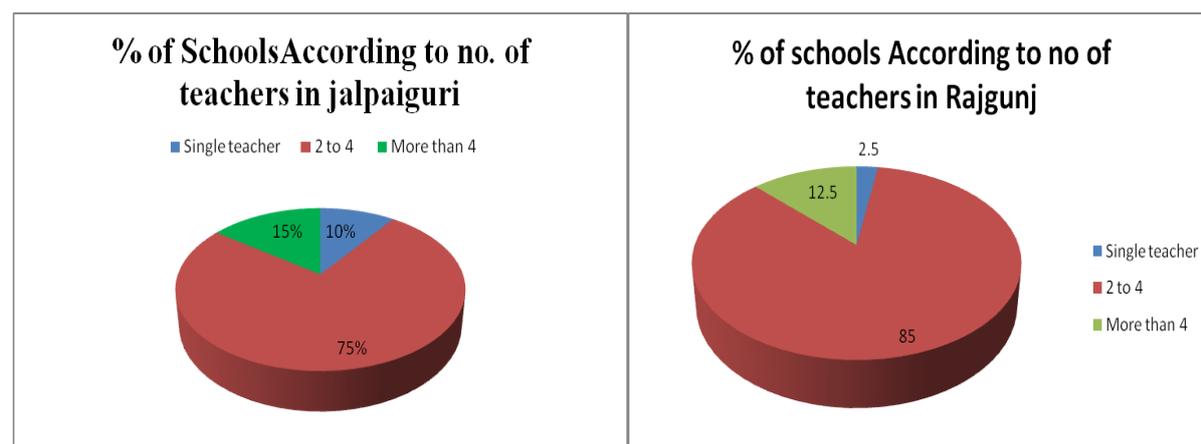
### 7.5.2. School with teachers availability

**Table 7.3 status of school with single teacher school**

Sample Area	No. of teachers	No of schools	%
Jalpaiguri (urban)	Single teacher	4	10
	2 to 4	30	75
	More than 4	6	15
	Total	40	100
Rajganj (Rural)	Single teacher	1	2.5
	2 to 4	34	85
	More than 4	5	12.5
	Total	40	100

Source-Field Survey

**Figure 7.6 percentages of schools on the basis of number of teachers**



Source-Field Survey

In all 10 per cent of schools had single teacher Jalpaiguri as against 2.5 per cent in Rajganj. Further table 7.3, it was pointed out that out of 40 schools in Jalpaiguri, only 15 per cent of schools are provided with teachers more than 4 as against 12.5 per cent in Rajganj. In all 75 per cent of schools in Jalpaiguri and 85 per cent of schools in Rajganj are provided teachers in between 2 to 4.

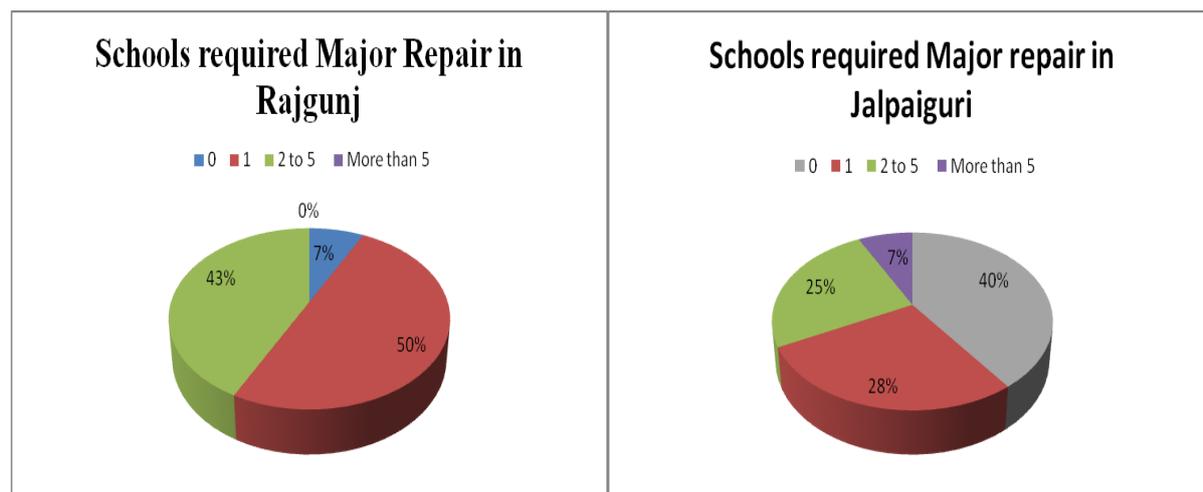
### 7.5.3 School with good condition in class rooms

**Table 7.4 Status of Schools with good condition in class rooms**

Sample Area	No of class rooms required Major Repair	No of schools	%
Jalpaiguri (Urban)	0	16	40
	1	11	27.5
	2 to 5	10	25
	More than 5	3	7.5
	Total	40	100
Rajganj (Rural)	0	3	7.5
	1	20	50
	2 to 5	17	42.5
	More than 5	0	0
	Total	40	100

Source-Field Survey

**Figure 7.7 percentage of schools required major repair**



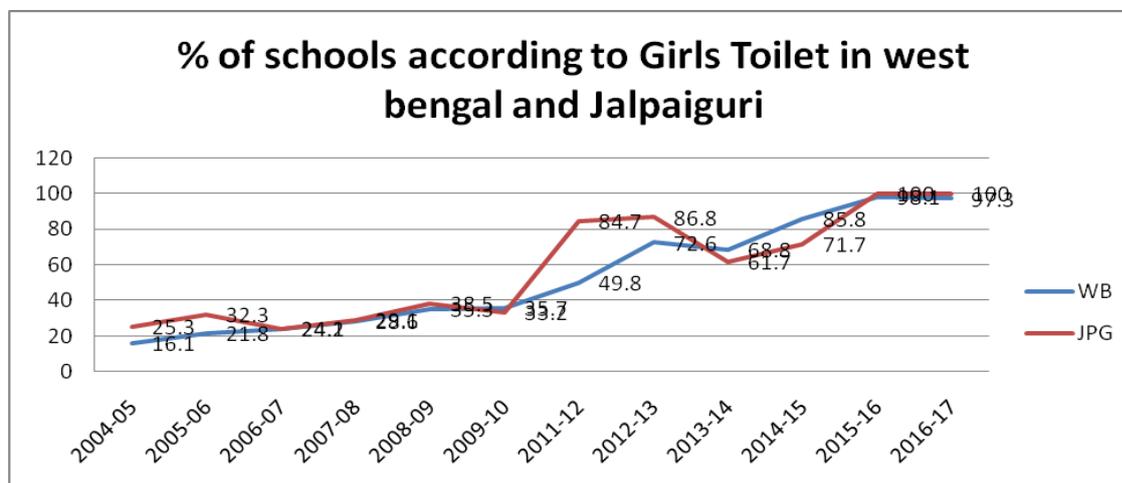
Source-Field Survey

The above table 7.4 reveals that, out of 40 schools in Jalpaiguri, 16 (40 percent ) schools require no major repair in their schools, followed by 11 (27.5 percent), 10 (25 percent) and 3 (7.5 percent) schools require major repair 1 classroom, 2 to 5 classrooms and more than 5 classrooms respectively.

It is also evident that 7.5 percent of the schools in Rajganj were not required any major repair. However, 50 % of the schools require major repair in respect of single class. Out of the total, 40 respondents, 17 (42.5%) opinion that they require major repair in their schools in 2 to 5 rooms.

### 7.5.4 Girls' toilet facilities

**Figure 7.8 Status of Girls toilet in Jalpaiguri and Rajganj from 2004 to 2017**



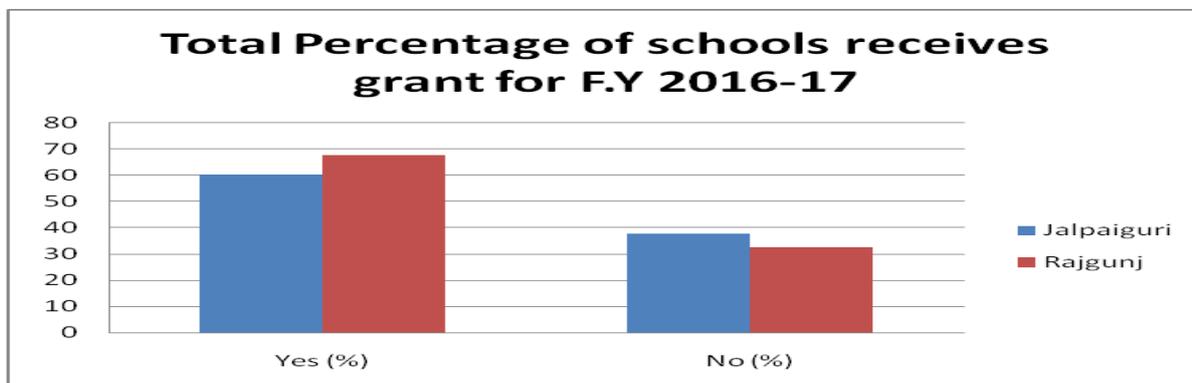
Source-DISE (<http://udise.in>)

According to MHRD, about 20 per cent of total schools in India is suffering from toilet facilities for girls. However, in West Bengal, positive changes are visible in recent years, for instances availability of girls toilet is about 90.6 percent in primary level, whereas the availability of boys toilet 62.4percent. Regarding girls toilet facility in schools, Jalpaiguri had been maintaining increasing trend in comparison to West Bengal. As per DISE data, a remarkable improvement was made in 2010-11, and the district is still maintaining is an impressive picture regarding girls toilet facility. More schools now have the facility girls toilet facility, about 100 per cent of schools had girls toilet in schools in 2016-17 compare to 38 per cent in 2008-09; and 25 per cent in 2004-05.

Girl's toilet facilities were available in 100 per cent of schools from Jalpaiguri and as well as Rajgunj. However, the availability of toilet facilities does not guarantee that it is used by the target beneficiaries.lack of water for washing, and occasional cleaning made the toilet facilities non-functional in most of the schools. As per the survey,72 per cent of schools in Jalpaiguri visited had toilet facilities that were usable on the day of the survey as compared to 63 per cent in Rajgunj.

### 7.5.5 Provision of maintenance and development grant

**Figure 7.9 Status of provision of school maintenance grant and development grant**

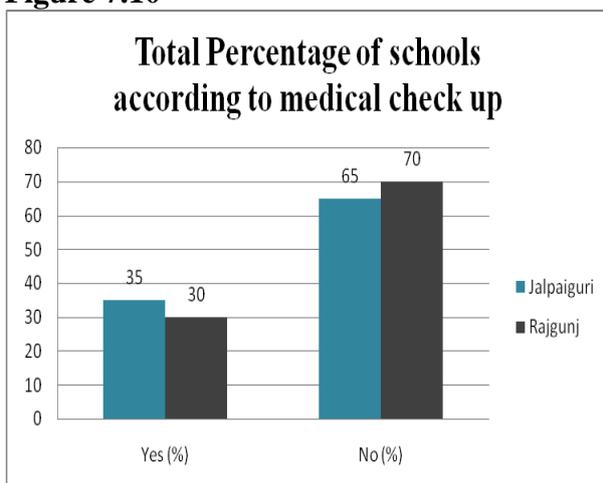


Source-Field Survey

Under the SSA, a school maintenance grant Rs.5000( up to 3 classrooms) and Rs.10,000 per school (more than 3 classrooms) are regularly sanctioned in the annual work plan. Survey reveals that 24 schools (60 per cent) out of 40 schools in Jalpaiguri is provided with a grant in 2016-17. Likewise, 27 schools (67.5 per cent) in Rajgunj already received a grant in respect of school development and maintenance.

### 7.5.6 Provision for Medical Check Up

**Figure 7.10**



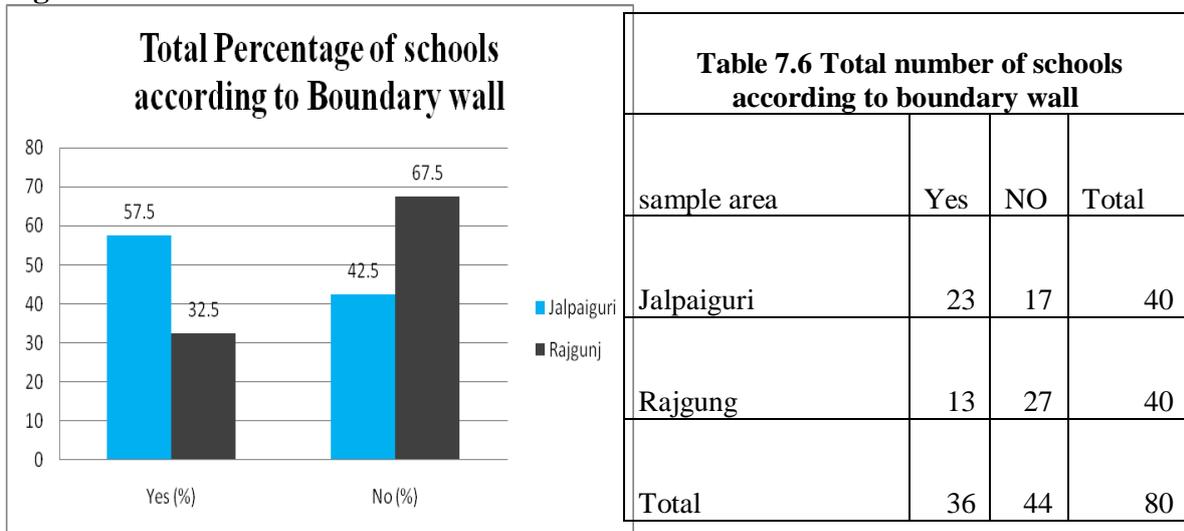
Source-Field Survey

sample area	Yes	NO	Total
Jalpaiguri	14	26	40
Rajganj	12	28	40
Total	26	54	80

Medical check up facility was available in 35 percent schools in Jalpaiguri and 30 percent Schools in Rajganj.

### 7.5.7 Provision for Boundary Wall

**Figure 7.11**

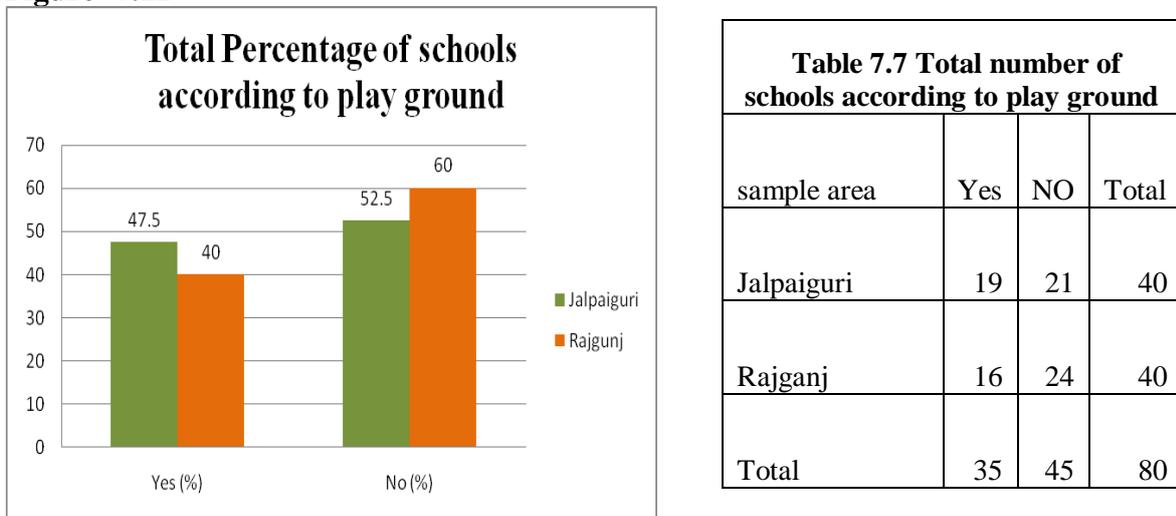


Source-Field Survey

Boundary wall available in 57.5 schools in jalpaiguri and 32.5% schools in Rajgunj.

### 7.5.8 Provision for Play ground

**Figure -7.12**



Source-Field Survey

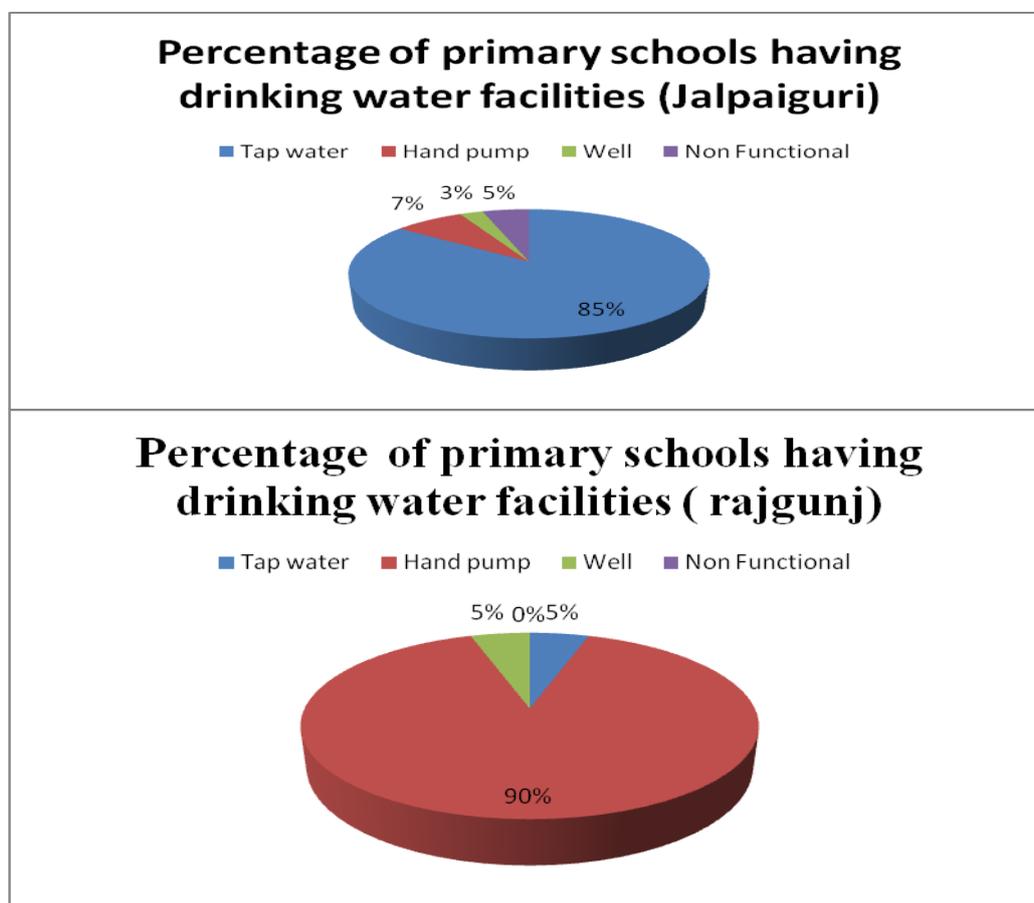
Play ground facility was available 47.5 percent schools in Jalpaiguri and 40 percent schools in Rajganj.

### 7.5.9 Provision for Drinking water

Table 7.8 Total number of schools according to drinking water facilities						Total
Jalpaiguri		Tap water	34			34
		Hand pump	3			3
		well	1			1
		Non Functional				2
Rajgunj	Yes	Tap water	1	NO	NA	1
		Hand pump	37		NA	37
		well	2		NA	2
		Non Functional	0		NA	0
Tortal		78		2	80	

Source-Field Survey

Figure 7.13 status of drinking water facilities



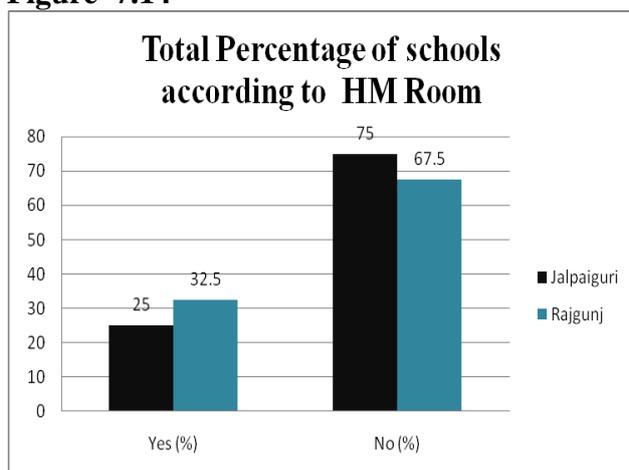
The table 7.8 that out of 40 primary schools in Jalpaiguri, 97.5 per cent of the schools were having the facilities of drinking water. It is also evident that 85 per cent of the habitants have been used tap water for drinking and washing purposes. Likewise, 100 per cent of schools in

Rajganj sample area were having the facilities of drinking water, and 90 per cent of the habitants are depended on hand pumps.

### 7.5.10 Classification of Schools according to HM rooms

As per schedule to SSA, a separate HM room should be there in each of the primary school. The requirement of head master rooms in the sample area are as follows:

**Figure 7.14**



Source-Field Survey

sample area	Yes	NO	Total
Jalpaiguri	10	30	40
Rajganj	13	27	40
Total	23	57	80

The above table reveals that 30 (75 percent) and 27 (67.5 percent) primary schools were not having separate room masters in Jalpaiguri and Rajganj.

### 7.5.11 Student teacher ratio

Data was collected from different schools as number of students per teacher .Sample wise data was classified and computed .The summarized results are as follows:

**Table 7.10 Student teacher ratio**

Area	Minimum	Maximum	Mean	Standard deviation	Mode	Median
Jalpaiguri	9	71	25.2250	13.64173	16	24
Rajganj	4	47	21.825	10.5609	22.0	21

Source-Field Survey

In the schools of Rajganj area, it was observed that the number of students per teacher ranges between 4 to 71, while the majority of the school observed the number 22. The difference between mean, median and mode is marginal indicating that the distribution

For Jalpaiguri schools, the number of students per teacher ranges between 4 to 47 while the majority of the schools observed the number 16. on the basis of central tendency measure, Jalpaiguri schools accommodate more students per teacher than Rajganj.

### 7.6 Response of Head teacher about the civil works for the improvement at Elementary Education in Jalpaiguri

This chapter expressed the observation of head teachers/ teacher in charge and teachers w.r.t civil works for the improvement of elementary education with the help of data analysis and interpretation. To ascertain the provision of various civil facilities in the school, a non-directive interview schedule was taken amongst the teachers/ head teachers with the help of 3 points scale. The score value of each of the civil works is shown below. The scorecard analysis was prepared with the help of views of head teachers/teachers with respect to inputs (civil works) are provided into schools.

**Table 7.11 status of civil works at Jalpaiguri N=40**

SL No	CIVIL WORK FACILITIES	GOOD	FAIR	POOR	TOTAL SCORE VALUE	RATING
1	Availability of class room adequate	19(47.5)	14(35)	7(17.5)	52(65)	1.3
2	Condition of the class room good	10(25)	7(17.5)	23(57.5)	27(33.75)	0.675
3	Space of the room Adequate	26(65)	4(10)	10(25)	56(70)	1.4
4	Grant adequate for toilet	25(62.5)	11(27.5)	4(10)	61(76.25)	1.525
5	Grant adequate for class room	13(32.5)	12(30)	15(37.5)	38(47.5)	0.95
6	Availability of computer Facilities adequate	0	0	40	0	0
7	Furniture for students sufficient	10(25)	5(12.5)	25(62.5)	25(31.25)	0.625
8	CWSN Facilities were adequate	0	4(10)	36(90)	4(5)	0.1
9	TLM facilities Adequate	22(55)	13(32.5)	5(12.5)	57(71.25)	1.425
10	Provision of drinking water	32(80)	8(20)	0	72(90)	1.8

The analysis is divided into two sections on the basis of rating score

Section A-it includes those facilities having rating 0 and it is categorised as “poor”. It includes sl no-5 “Availability of computer Facilities adequate”

Section B-it includes those facilities having rating up to 1 and it is categorised as “fair” provision. Those were: Input at Sl. No 2 –“Condition of the classroom good”, Input at Sl no-5 “Grant adequate for classroom,” Input Sl no-5 “Availability of computer Facilities adequate”, Input -6” Furniture for students sufficient”, Input Sl no- 7 “CWSN Facilities were adequate”.

Section C- It includes those facilities having rating from 1 to 2 and it is categorised as “fair”.These were sl.no-1 Availability of classroom adequate,sl.no-3 Space of the room Adequate, sl.no-4 Grant adequate for toilet

Sl no-8 TLM facilities Adequate

### 7.7 Response of Head teacher about the civil works for the improvement at Elementary Education in Rajganj

**Table 7.12 status of civil works at Rajganj**

**N=40**

SL No	CIVIL WORK FACILITIES	GOOD	FAIR	POOR	TOTAL SCORE VALUE	RATING
1	Availability of class room adequate	26	11	3	63	1.575
2	Condition of the class room good	16	9	15	41	1.025
3	Space of the room Adequate	33	5	2	71	1.775
4	Grant adequate for toilet	21	19	0	61	1.525
5	Grant adequate for class room	5	19	16	29	0.725
5	Availability of computer Facilities adequate	0	0	40	0	0
6	Furniture for students sufficient	5	24	10	34	0.85
7	CWSN Facility	1	0	39	2	0.05
8	TLM facilities Adequate	25	12	3	62	1.55
9	Provision of drinking water	29	9	2	67	1.675

The analysis is divided into two section on the basis of score value

Section A-it includes those facilities having rating 0 and it is categorised as “poor”.It includes sl no-5 “Availability of computer Facilities adequate”

Section B-it includes those facilities having rating up to 1 and it is categorised as”fair” provision. Those were: Input at Sl. No 2 –“Condition of the classroom good”,Input at Sl no-5 “Grant adequate for classroom,” Input Sl no-5 “Availability of computer Facilities adequate”,Input -6” Furniture for students sufficient”, Input Sl no- 7 “CWSN Facilities were adequate”.

Section C- It includes those facilities having rating from 1 to 2 and it is categorised as “fair”.These were sl.no-1 Availability of classroom adequate,sl.no-3 Space of the room Adequate, sl.no-4 Grant adequate for toilet

Sl no-8 TLM facilities Adequate

### 7.8 Relationship between gender and attendance in Schools at Rajganj.

Null hypothesis (H0)-There is no relationship between the gender and attendance in schools at Rajganj

Alternative hypothesis (H1): There is a relationship between the gender and attendance in schools at Rajganj by using chi-square test we can verify this hypothesis.

**Table 7.13 Chi square and correlation test between gender and attendance in Rajganj**

Chi-Square Tests				Correlations			
	Value	df	Asymp. Sig. (2-sided)			att_R	gender
Pearson Chi-Square	5.097 <sup>a</sup>	2	0.078	Attendance	Pearson Correlation	1	0.123
Likelihood Ratio	5.133	2	0.077		Sig. (2-tailed)		0
Linear-by-Linear Association	2.702	1	0.1		N	180	180
N of Valid Cases	180			Gender	Pearson Correlation	0.123	1
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.73.					Sig. (2-tailed)	0	
					N	180	180

From the above table, it can be observed that co-relation coefficient is 0.123 and the significant correlation was found between attendance and gender. Presence is found to be positively correlated with gender (.123,  $P < 0.5$ ) which depicts a positive relationship between presence and gender.

Moreover, the above table disclosed that the relationship between attendance and gender in the Jalpaiguri was high. The calculated value  $\chi^2$  (5.097) is less than the table value of  $\chi^2$  (5.99) at  $P \leq 0.05$  level;  $df=2$ . The null hypothesis ( $H_0$ ) “There is no relationship between the gender and attendance in schools at Rajganj”, hence accepting null hypothesis while the alternative hypothesis “There is a relationship between the gender and attendance in schools at Rajganj” was rejected. The conclusion from the above chi-square revealed that gender and attendance are interrelated.

### 7.9 Relationship between gender and attendance in Schools at Jalpaiguri

Null hypothesis ( $H_0$ )-There is no relationship between the gender and attendance schools at Jalpaiguri

Alternative hypothesis ( $H_1$ ): There is a relationship between the gender and attendance in schools at Jalpaiguri

**Table 7.14 Chi square and correlation test between gender and attendance in Jalpaiguri**

Correlations		Att_J	Gender_J
Attendance	Pearson Correlation	1	-0.127
	Sig. (2-tailed)		0.088
	N	180	180
Gender	Pearson Correlation	-0.127	1
	Sig. (2-tailed)	0.088	
	N	180	180

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.246 <sup>a</sup>	2	0.197
Likelihood Ratio	3.256	2	0.196
Linear-by-Linear Association	2.906	1	0.088
N of Valid Cases	180		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.50.

From the above table, it can be observed that co-relation coefficient is -(0.127) and the significant correlation was not found between attendance and gender. Presence is found to be

negatively y correlated with gender (-0.127, P<0.5) which depicts a negative relationship between attendance and gender.

Moreover, the above table disclosed that the relationship between attendance and gender in the Jalpaiguri was low. The calculated value  $\chi^2$  (3.245) is less than the table value of  $\chi^2$  (5.99) at  $P \leq 0.05$  level;  $df=2$ . The null hypothesis (H0) “There is no relationship between the gender and attendance in schools at Jalpaiguri”, hence accepting null hypothesis while the alternative hypothesis “There is a relationship between the gender and attendance in schools at Jalpaiguri ” was rejected. The conclusion from the above chi-square revealed that gender and attendance are not interrelated.

### 7.10 Relationship between attendance and condition of the class room in Jalpaiguri

H0=There is no significant relationship between attendance and the condition of the class room in Jalpaiguri

H1= There is significant relationship between attendance and the condition of the class room in Jalpaiguri

### 7.15 correlation test between attendance and condition of the class room in Jalpaiguri

Correlations			
		Attendance	Classroom condition
Attendance	Pearson Correlation	1	.755**
	Sig. (2-tailed)		.000
	N	180	180
Classroom condition	Pearson Correlation	.755**	1
	Sig. (2-tailed)	.000	
	N	180	180

It may be revealed that value of co- efficient co relation between attendance and condition of the class room is 0.755.It represents a significant relationship between two variables. Thus null hypothesis “there is no significant relationship between attendance and the condition of the class room in Jalpaiguri” is rejected and alternative hypothesis “there is significant

relationship between attendance and the condition of the class room in Jalpaiguri' is accepted. It also implies that significance bond of co relation exist between two variables.

**7.16 Relationship between Attendance and condition of the class room in Rajganj**

H0=there is no significant relationship between attendance and the condition of the class room in Rajganj.

H1= there is significant relationship between attendance and the condition of the class room in Rajganj.

**7.16 correlation test between attendance and condition of the class room in Rajganj**

Correlations			
		Attendance	Classroom condition
attendance	Pearson Correlation	1	.177*
	Sig. (2-tailed)		.018
	N	180	180
Condition	Pearson Correlation	.177*	1
	Sig. (2-tailed)	.018	
	N	180	180

It may be revealed that value of co- efficient co relation between attendance and condition of the class room is 0.177.It represents a significant relationship between two variables. Thus null hypothesis “there is no significant relationship between attendance and the condition of the class room in Rajganj” is rejected and alternative hypothesis “there is no significant relationship between attendance and the condition of the class room in Rajganj’ is accepted. It also implies that significance bond of co relation exist between two variables.

Chapter-VIII

**Summary, Conclusion  
and suggestions**

## Chapter-VIII

### Summary, Conclusion and suggestions

#### 8.1 Introduction:

India is now recognised as a developing and the most significant democratic country. There have been significant changes made in primary education especially in enrolment and access to schooling system, but dropout rate and learning outcomes remain challenges for the central and as well as state Govt. As per DISE data, enrolment in class VII has almost doubled, from 11 million to 22 million in between 2004-05 to 2014-15. However, as per the ASER report (2016), 27 per cent children in class VII could not read the text from class II, and approximately 57 percent were unable to solve 3 digits by 1 digit division sum. All total 14 per cent of the youth (age 14-18) are not enrolled anywhere In Jalpaiguri 1 per cent of total children age between 6-14 were not enrolled in the schools. In all total 53 percent of the children in class VII was able to read the text from class I and in case of solving subtraction, 19 per cent were able to do that. Learning basic language and mathematics is the prerequisite of elementary education.

Enrolment in primary schools has set a record achievement due to various programmes run by the Govt, NGOs and other agencies in different parts of the country including remote areas. Despite these achievements, keeping the children in the education system up to the college level is a difficult task. As per ASER report (2016), 81 per cent of all youth have completed 8 years of schooling, and 43% of the children drop out from the schooling system before completion of primary schools.

The primary objects of MDM to prevent 'classroom hunger' and also provide nutritional support which helps in the healthy growth of the children. India is recognised as World's fastest growing economy and set to become the youngest country by 2020. However, another reflection is that 15.2% of the Indian population under nutritional and 38.5% of the children are suffering from malnutrition. To prevent this, MDM plays a pivotal role to improve the nutritional status of the children and also to eliminate "classroom hunger" from the class.

From the evidence, it was confirmed that the implementation of MDM increased enrolment and retention. MDM also provides economic support for the weaker section of the society by

supplying nutritional food and education in the school. MDM is known as the most significant launch programme in the world. With this nationwide programme, MDM covers all the Schools in Jalpaiguri to improve the enrolment, attendance, and retention of school children (I to VIII). The MDM contributed a lot to achieve the benefits of UEE. Children are used to sitting together for MDM, and it brings social equality among the different children belonging to different caste and religion. The Central and state govt both are trying the best possible way to continue the programme to accomplish the objectives of MDM. As per the norms, hot cooked MDM should be served to all. However, still, there are so many problems which hinder proper implementation of the MDM. The present study investigates the significant issues and attempt has been made to suggest some possible suggestions and measures. The key points are highlighted in the survey like enrolment, attendance along with learning achievement. The present study is an attempt to study the impact of MDM on overall elementary education. The achievement of any programme depends on the effective control and monitoring system. So, evaluation is much more needed to know the right and fair picture of the programme to understand the overall impact of MDM in SSA. This type of study is beneficial in suggesting policies and recommendations to the Govt.

## **8.2 Major Findings of the Study Based on Jalpaiguri Sadar & Rajgunj Block On The Response Of the Stakeholders( parents, teacher and students) Toward The Achievements Of SSA**

The response of stakeholders (parents) regarding the impact of MDM and other provisions in the primary schools

1. The opinion of the parents of the surveyed schools revealed that 18.75 per cent have a high level of satisfaction and 37.5 of the parents have a low level of satisfaction irrespective of their family income in Jalpaiguri. The ratio of satisfaction was in Jalpaiguri 65 per cent and 85 per cent in Rajgunj. Based on the row and column percentage 83 per cent with a low level of income (up to Rs.5,000) are fully satisfied with MDM in Jalpaiguri. Whereas 60 per cent with higher income ( more than Rs.15,000) with a low level of satisfaction with MDM as against 5 per cent with higher income with a high level of satisfaction of MDM.69 per cent of parents with a moderate income (Rs.10,000-15,000) are satisfied with MDM in Jalpaiguri. Chi-square test proved that parents responded significantly from each other with regard to the satisfaction of MDM in schools in Jalpaiguri as calculated value of chi-square (23.92 ) is

significant, i.e. there is a significant association between family income and MDM satisfaction.

Based on row and column perspective, 64 per cent of the parents ( income up to Rs,5,000) have satisfied about the provision of MDM in Rajgung whereas 67 per cent of the parents ( income group above Rs.15,000) have expressed a high level of satisfaction about MDM. Only 15 of the total parents in Rajganj have come out with a low level of satisfaction irrespective of their income.chi square value obtained proved that respondents feel that there is no significant association between family income and satisfaction with MDM. Pearson weak negative correlation was found ( $r=-0.091$ ) between family income and MDM satisfaction.

2. The opinion of the parents of the surveyed schools revealed 50 per cent of the parents have a low level of satisfaction with quality with a low level of response to illness in Jalpaiguri ;66.67 per cent with have a high level of satisfaction with quantity with low level of response to illness /diseases whereas 17.65 per cent have a low level of satisfaction with quantity with a high level of response to illness. It also revealed that 21.25 per cent of the parents have a high level of response with illness whereas 60 per cent have a low level of response with illness or health problems. By the cross tabulation, it also observed that 47.5 percent of parents have high-level satisfaction with quality. Hence, high level of quantity results low of illness and low level of quantity results in high level of illness/ disease, in Jalpaiguri As p-value is less than 0.05, it is concluded that there is a significant association between level of quantity and illness /disease.

The opinion of the parents of the surveyed schools revealed 33.75 per cent of parents have a low level of response with illness whereas 31.25 per cent have a high level of response with illness. From the cross-tabulation table it is revealed that 65 of the parents with a high level of satisfaction with quantity whereas 15 per cent of the parents with a low level of satisfaction with quantity. Based on row and column percentage 18.52 with low level of satisfaction with quantity with low level of illness whereas 4 per cent have a low level of satisfaction with quantity with a high level of response with illness;70.37 per cent of parents have a high level of satisfaction with quantity with low level of response with illness whereas 64 per cent have a high level of satisfaction with a high level of response with illness. As p-value is greater than 0.05, it is concluded that there is no significant association between the level of quantity and illness/disease.

3. It has been found that 18.75 of the parents in Jalpaiguri were satisfied with the quality of MDM supplied whereas 37.5 per cent has expressed their low opinion about quality. Based on the row and column percentage 76.67 have a low level of quality with a low level of satisfaction;6.67 per cent have a low perception about satisfaction with the high level of satisfaction with quality whereas 6.67 per cent high level of satisfaction with the low-level quality and 53.33 per cent have high level of satisfaction with high level of quality. The analysis of cross-tabulation disclosed that highest count 43 (53.75 per cent) out of 80 agreed that sufficient quality of MDM was not supplied in the schools in Jalpaiguri As p-value is less than 0.05, it is concluded that parents satisfaction of MDM is associated with quality.

It has been found that 35 per cent of the parents in Rajganj were satisfied with the quality of MDM supplied whereas 21.25 per cent has expressed their low opinion about quality. Based on the row and column percentage 70.59 have a low level of quality with a low level of satisfaction;11.76 per cent have a low perception about satisfaction with the high level of satisfaction with quality whereas 3.57 per cent high level of satisfaction with the low-level quality and 54.55 per cent have high level of satisfaction with high level of quality. The analysis of cross-tabulation disclosed that highest count 43 (53.75 per cent) out of 80 agreed that moderate quality of MDM was in the schools in Rajganj. As p-value is less than 0.05, it is concluded that parents satisfaction of MDM is associated with quality. Hence high-level quality leads to high-level satisfaction,

### **8.3 The response of stakeholders (Students) regarding the impact of MDM and other provisions in the primary schools**

1. The opinion of the students of the surveyed schools revealed that difference rate of attendance in Jalpaiguri. By the cross-tabulation of both the variables (High and low level of satisfaction),56.75 per cent of children with a high level of attendance with a positive satisfaction in MDM whereas 10.55 per cent of children has high attendance with a low level of satisfaction. From the table 6.9, it is revealed that 17.70 per cent with a negative level of satisfaction with MDM in Jalpaiguri.

As p-value is greater than 0.05, it is concluded that there is no significant association between the level of attendance and satisfaction in Jalpaiguri. 56.75 per cent of children with a high level of attendance with a high level of satisfaction in MDM

Whereas 25 per cent of children have high attendance with a low level of satisfaction. From the table 6.11, it is revealed that 8.90 per cent of children expressed their low level of satisfaction with MDM in Rajganj. It also revealed that 4.2 per cent of the children have a low level of attendance with high satisfaction in MDM whereas 25 per cent of children has a low level of satisfaction with high attendance. It also observed that 75 per cent of children have low attendance with low satisfaction. As p-value is greater than 0.05, it is concluded that there is no significant association between the level of attendance and satisfaction.

2. The opinion of the students of the surveyed schools in Jalpaiguri revealed 126 (70 per cent) out of 180 children have a low level of response with illness whereas (17 out of 180) 9.44 per cent have a high level of response with illness. From the cross-tabulation table it is revealed that 67.78 percent (122 out of 180) of the children with high level of satisfaction with quantity whereas 12.78 (23 out of 180) percent of the children with low level of satisfaction with quantity. Based on row and column percentage 6.35 of children have a low level of satisfaction with quality and low level of response in illness; 76.98 have low-level illness and high level of satisfaction with quality whereas 47.06 per cent have high response in illness with low level of quantity and 41.17 per cent children have high level of illness with high level of satisfaction in quantity. Hence it is concluded that the high level of quantity leads to a low level of response in illness. As p-value is less than 0.05, it is concluded that there is a significant association between the level of attendance and satisfaction

The opinion of the students of the surveyed schools in Rajganj revealed 69 (38.33 per cent) out of 180 children have a low level of response with illness whereas 33.89 (61 out of 180) per cent have a high level of response with illness. It is revealed that 85.5 per cent (154 out of 180) of the children with a high level of satisfaction with quantity whereas 10.56 (19 out of 180) per cent of the children with a low level of satisfaction with quantity. Based on row and column percentage 8.70 of children have low level of satisfaction with quality and low level of response in illness; 86.960 have low-level illness and high level of satisfaction with quality whereas 13.11 per cent have high response in illness with low level of quantity and 81.97 per cent children have high level of illness with high level of satisfaction in quantity. As p-value

is greater than 0.05, it is concluded that there is no significant association between the level of attendance and satisfaction

So there is the different opinion of stakeholders regarding the quantity of MDM and illness/health problems in Jalpaiguri Sadar and Rajganj. Parents and students believe that by providing a sufficient quantity of MDM in Jalpaiguri would result in less number of illness or health problems. However, in Rajganj, there is no association between illness and MDM quantity so it is concluded illness or health problems may arise due to other local causes.

**3.** It is revealed that approximately 82 % of the students in Jalpaiguri are satisfied with the MDM. The findings of this satisfaction revealed that i) Through correlation analysis, the relationship has been studied between two variables i.e satisfaction and taste. It has been found that that association was positive and significant. The value of Pearson Correlation is +0.396 which meant that satisfaction of MDM increases with the taste of the MDM.

ii) By correlation analysis, it has been found that there is positive ( $r=+0.214$ ) and significant relationship between satisfaction and timely delivery of MDM

iii) By correlation analysis, it has been examined that there is positive and significant correlation ( $r=0.344$ ) was found between satisfaction and feeling full stomach which meant that feeling full stomach would increase the satisfaction of MDM.

iv) Through correlation analysis, the relationship has been examined between two variables, i.e. satisfaction and an empty stomach. It has been found that the association was found a negative ( $r= -0.247$ ) and significant relationship between satisfaction and empty stomach at the time going to school. Only 8.9 of students respondent that they often go to school in the morning at empty stomach.

The multiple correlation coefficient is 0.484 measured the degree of relationship between actual values and predicted values of satisfaction of MDM in the opinion of children in Jalpaiguri. Predicted values are obtained as a linear combination of taste ( $X_{j1}$ ), full stomach ( $X_{j2}$ ), timely delivery ( $X_{j3}$ ) and ( $X_{j4}$ ) empty stomach, the coefficient value of 0.484 indicated that the relationship between satisfaction of MDM and the four independent variables which are quite strong and positive, The value  $R^2$  measures the extent of the variability in the outcomes is accounted by the predictors. Thus the value R square is 0.235, i.e. 23.5 per cent of

the variation of the satisfaction of MDM is explained by the estimated regression model that uses taste, full stomach, timely delivery and an empty stomach as the independent variables

The multiple regression equation is

$$Y_j = 1.945 + 0.236X_{j1} + 0.174X_{j2} + 0.176X_{j3} - 0.177X_{j4}$$

Here the coefficient of  $X_{j1}$  is 0.236 represents the partial effect of test on satisfaction in MDM. The estimated positive sign indicates that such effect is positive and satisfaction would increase by 0.236 for every unit increase in test. The coefficient of  $X_{j2}$  represents the partial effect of feeling full stomach after taking MDM on the satisfaction of MDM holding  $X_{j1}$  as constant. The estimated positive sign implies that such effect is positive and student's satisfaction would increase by 0.174 for every unit increases and this coefficient value is significant at 5 per cent level of significance. The coefficient of  $X_{j3}$  important factor to satisfaction followed by full stomach after MDM (0.176). The coefficient of  $X_{j4}$  indicates a negative sign, and it implies that every one unit increase in the predicted variable ( $X_{j4}$ ), the student satisfaction will decrease

**4.** It is revealed that approximately 87 % of the students in Rajganj are satisfied with the MDM. The findings of this satisfaction revealed that i) It is found that approximately 27 per cent of the students said that they did not like the test of the MDM. There is a positive and significant relationship between satisfaction and test ( $r=0.659$ ) of the MDM. It means that the test of the MDM would lead to change positive change in satisfaction.

ii) By correlation analysis, it has been examined that there is a positive and significant correlation ( $r=0.590$ ) is found between satisfaction and feeling full stomach which meant that feeling full stomach would increase the satisfaction of MDM. It is found that 44 per cent of students confirmed the full stomach after MDM.

iii) By correlation analysis, it has been found that there is positive ( $r=+0.397$ ) and significant relationship between satisfaction and timely delivery of MDM. It means that timely delivery of MDM would increase the satisfaction of MDM.

iv) Through correlation analysis, the relationship has been examined between two variables, i.e. satisfaction and an empty stomach. It has been found that the association was found positive ( $r= 0.368$ ) and significant relationship between satisfaction and an empty stomach.

The multiple correlation coefficient is 0.710 measured the degree of relationship between actual values and predicted values of satisfaction of MDM in the opinion of children in Rajganj. Predicted values are obtained as a linear combination of taste ( $X_{r1}$ ), full stomach ( $X_{r2}$ ), timely delivery ( $X_{r3}$ ) and ( $X_{r4}$ ) empty stomach, the coefficient value of indicated that the relationship between satisfaction of MDM and the four independent variables which is quite strong and positive, The value  $R^2$  measures the extent of the variability in the outcomes is accounted by the predictors. Thus the value R square is 0.504 i.e 50.4 per cent of the variation of the satisfaction of MDM is explained by the estimated regression model that uses taste, full stomach, timely delivery and empty stomach as the independent variables.

The multiple regression equation is

$$Y_i = 0.822 + 0.439X_{r1} + 0.209X_{r2} + 0.142X_{r3} + 0.067X_{r4}$$

Here the coefficient of  $X_{r1}$  is 0.439 represents the partial effect of test on satisfaction in MDM. The estimated positive sign indicates that such effect is positive and satisfaction would increase by 0.439 for every unit increase in taste. The coefficient of  $X_{r2}$  represents the partial effect of feeling full stomach after taking MDM on the satisfaction of MDM holding  $X_{r1}$  as constant. The estimated positive sign implies that such effect is positive and student's satisfaction would increase by 0.209 for every unit increases and this coefficient value is insignificant at 5 per cent level of significance. The coefficient of  $X_{r1}$  is the most important factor in the satisfaction of MDM followed by the full stomach (0.209), timely delivery (0.142) and empty stomach (0.067)

**5.** Approximately 60 per cent of the students in Jalpaiguri confirmed that MDM provided to them is hygienic. The findings of this study revealed that i) Through correlation analysis, the relationship has been studied between two variables i.e hygiene and cleanness of dinning. As such there is no separate dining for them, most of the time MDM is being served in Verandah and, The Pearson's value is 0.632 indicates that there is a positive and significant association between two variables.

ii) Approximately 87 per cent of students in Jalpaiguri confirmed the provision of clean drinking water. It is found that the provision of drinking water has a positive and significant ( $r=0.442$ ) association with positive change in hygiene.

iii) By correlation analysis, it is observed that there is a negative relationship ( $r= -0.367$ ) and significant relationship between illness and hygiene. Only 5 per cent of the total sample reported about illness after MDM.s

iv) It has been found that hygiene and washing hands before MDM are positively correlated ( $r=0.281$ ). The relationship between the two variables is significant. As the association is less, so it is assumed that still some students were not aware of the provision of washing hands.

v) There is a positive association between hygiene and cleanness of the kitchen store, and the association was found significant ( $r=0.522$ ). Approximately, 57 per cent student, believe that kitchen store is hygienic and this powerhouse keeps them fit.

In multiple regression analysis, the multiple correlation coefficient is 0.742 measured the degree of relationship between actual values and predicted values of hygiene factors of MDM in the opinion of children in Jalpaiguri. Predicted values are obtained as a linear combination of cleaners of dining ( $X_{jh1}$ ), clean drinking water ( $X_{jh2}$ ), illness ( $X_{jh3}$ ), ( $X_{jh4}$ ) provision of washing hands before meal and ( $X_{jh5}$ ) cleanness of kitchen store and the coefficient value of 0.742 indicated that the relationship between hygiene satisfaction of MDM and the five independent variables which are quite strong and confident, The value  $R^2$  measures the extent of the variability in the outcomes is accounted by the predictors. thus the value  $R$  square is 0.551, i.e. 51 per cent of the variation of the hygiene of MDM is explained by the estimated regression model that uses cleanness of dining, drinking water, illness, provision of washing hands and cleanness of kitchen store as the independent variables.

The multiple regression equation is

$$Y_{jh} = 1.236 + 0.337X_{jh1} + 0.162X_{jh2} - 0.308X_{jh3} + 0.128X_{jh4} + 0.203X_{jh5}$$

Here the coefficient of  $X_{jh1}$  is 0.337 represents the partial effect of cleanness of the dining area on hygiene factors of MDM in Jalpaiguri, assuming the other variables are constant. The estimated positive sign implies that such effect is positive and hygiene factors of MDM would increase by 0.337 for every unit increase in cleanness of the eating area. The coefficient

of  $X_{jh2}$  is 0.162 represents the partial effect of drinking water facilities on hygiene factors of MDM, holding other variables constant. The coefficient of  $X_{jh3}$  -0.308 represents a negative impact of illness after participation in MDM on hygiene factors, keeping other variables as constant. The estimated negative sign implies that such effect is adverse. The coefficient of  $X_{jh4}$  is 0.128 represents the partial impact of washing hands on the hygiene of MDM, and this coefficient value is significant at 5 per cent level of significance. The Coefficient of  $X_{jh5}$  is 0.203 represents the partial effect of cleanness of kitchen store on hygiene factors of MDM

Based on standardised coefficient, cleanness of dining area (0.337) is the most essential factors in respect of hygiene in MDM, followed by (0.203) cleanness of kitchen store, (0.162) drinking water facilities, (0.128) provision of washing hands with soap and the least significant factor is illness (-0.308)

**6.** Approximately 67 per cent of the students in Rajganj confirmed that MDM provided to them is hygienic

i) Through correlation analysis, the relationship has been studied between two variables i.e hygiene and cleanness of dinning. The Pearson's value is 0.733 indicates that there is a positive and significant association between two variables. Approximately 64 per cent student believe that dining area is hygienic ii) Approximately 75 per cent of students in Ragjang confirmed about the provision of clean drinking water. It is found that the provision of drinking water has a positive and significant ( $r=0.588$ ) association with positive change in hygiene.

iii) ) By correlation analysis, it is observed that there is a negative relationship ( $r= -0.171$ ) and significant relationship between illness and hygiene. Only 4.5 per cent of the total sample reported about illness after MDM.

iv) It has been found that hygiene and washing hands before MDM are positively correlated ( $r=0.335$ ). The relationship between the two variables is significant. As the association is less, so it is assumed that still some students were not aware of the provision of washing hands. From the survey, it is found that only 14 per cent of student well aware of this.

v) There is a positive association between hygiene and cleanness of the kitchen store, and the association was found significant ( $r=0.708$ ). Approximately, 57 per cent student, believe that kitchen store is hygienic

The multiple regression equation is

$$Y_{rh} = 0.550 + 0.404X_{rh1} + 0.149X_{rh2} - 0.067X_{rh3} + 0.096X_{rh4} + 0.305X_{rh5}$$

In multiple regression, multiple correlation coefficient is 0.802 measured the degree of relationship between actual values and predicted values of hygiene factors of MDM in the opinion of children in Rajganj. Predicted values are obtained as a linear combination of cleanness of dining ( $X_{rh1}$ ), provision of clean drinking water ( $X_{rh2}$ ), illness ( $X_{rh3}$ ), ( $X_{rh4}$ ) provision of washing hands and ( $X_{rh5}$ ) cleanness of kitchen store and the coefficient value of 0.802 indicated that the relationship between hygiene satisfaction of MDM and the five independent variables which are quite strong and positive, The value  $R^2$  measures the extent of the variability in the outcomes is accounted by the predictors. thus the value R square is 0.644, i.e. 64.4 per cent of the variation of the hygiene of MDM is explained by the estimated regression model that uses cleanness of dining, provision of drinking water, illness, provision of washing hands and cleanness of kitchen store as the independent variables.

Here the coefficient of  $X_{rh1}$  is 0.404 represents the partial effect of cleanness of the dining area on hygiene factors of MDM in Jalpaiguri, assuming the other variables are constant. The estimated positive sign implies that such impact is positive and hygiene factors of MDM would increase by 0.404 for every unit increase in cleanness of dining area. The coefficient of  $X_{rh2}$  is 0.149 represents the partial effect of the provision of drinking water facilities on hygiene factors of MDM, holding other variables constant. The coefficient of  $X_{rh3}$  -0.067 represents a negative impact of illness on hygiene factors, holding other variables as constant. The estimated negative sign implies that such effect is adverse. The coefficient of  $X_{rh4}$  is 0.096 represents the partial impact of the provision of washing hands on the hygiene of MDM, and this coefficient value is significant at 5 per cent level of significance. The Coefficient of  $X_{rh5}$  is 0.305 represents the partial effect of cleanness of kitchen store on hygiene factors of MDM and value is significant at 5 per cent level of significance.

Based on standardised coefficient, cleanness of dining area (0.404) is the most essential factors in respect of hygiene in MDM, followed by (0.305) cleanness of kitchen store, (0.149) drinking water facilities, (0.096) provision of washing hands with soap and least insignificant factor is illness (-0.067)

#### **8.4 The response of stakeholders (Teachers) regarding the impact of MDM and other provisions in the primary schools**

1 .The opinion of the teachers in both the sample area indicates that there was an impact of an increase in enrolment after the implementation of MDM. Approximately 45 per cent of the teachers (out of 80) have perceived that that increase in enrolment due to the implementation of MDM.in Jalpaiguri (urban). But the ratio of increment was found higher in Rajgunj (Rural) was 81.25 per cent. Based on the row and column percentage 47.5 of teachers in Jalpaiguri have expressed their disagreement in respect to increase in enrolment whereas 22.4 per cent of the teacher in Rajgunj has a low level of agreement about the increase in enrolment .The Chi-square obtained proved that respondents feel that there is a significant difference in location of the school and an increase in enrolment.

The outcome of independent sample t-test conducted from the primary survey and indicated that, since p-value is less than 0.05 for an increase in enrolment, the null hypothesis is rejected at a five per cent level of significance. Based on the mean score, it is found that man value in respect of the increase in enrolment of Rajgunj is 2.68 and that of Jalpaiguri 1.98. It means that Rajgunj has higher enrolment ratio than Jalpaiguri. The difference is statistically significant.

2. The opinion of the teachers in both the sample area indicates that there was an impact of the reduction in drop out after the implementation of MDM. Approximately 68.75 per cent of the teachers (out of 80) have perceived that that reduction in drop out due to the implementation of MDM.in Jalpaiguri (urban). But the ratio was found higher in Rajgunj (Rural) was 81.25 per cent. Based on the row and column percentage 11.25percent of teachers in Jalpaiguri have expressed their disagreement in respect to reduction in drop out whereas 7.5 per cent of the teacher in Rajgunj have a low level of agreement about a decrease in drop out. The Chi-square obtained proved that respondents feel that there is no significant difference in location of the school and reduction in drop out.

The outcome of independent sample t-test conducted from the primary survey and indicated that, Since the p-value is more than 0.05 for a reduction in drop out, the null hypothesis is accepted at five per cent level of significance. Based on the mean score, it is found that man value in respect of a reduction in drop out of Rajganj is 2.74 and that of Jalpaiguri 2.58. It means that Rajganj has a higher reduction in drop out ratio than Jalpaiguri. Hence it is concluded that there is no significant difference with regard to drop out and the location of the schools.

**3.** The opinion of the teachers in both the sample area indicates that there was an impact of the increase in attendance after the implementation of MDM. Approximately 70 per cent of the teachers (out of 80) have perceived that that increase in attendance due to the implementation of MDM.in Jalpaiguri (urban). But the ratio of increment was found higher in Rajganj (Rural) was 82.5 per cent. Based on the row and column percentage 25 percent of teachers in Jalpaiguri have expressed their disagreement concerning increasing in attendance whereas 8.75 per cent of the teacher in Rajganj have the low level of agreement about the increase in attendance. The Chi-square obtained proved that respondents feel that there is a significant difference in location of the school and an increase in attendance.

Samer Samarraï and Barry Reilly (2000) presented empirical estimates for the determination of primary schools attendance rate between urban and rural and revealed that a statistically significant difference in primary schools attendance rates between urban and rural.

The outcome of independent sample t-test conducted from the primary survey and indicated that, since p-value is less than 0.05 for an increase in attendance, the null hypothesis is rejected at a five per cent level of significance. Based on the mean score, it is found that man value in respect of the increase in attendance of Rajganj is 2.74 and that of Jalpaiguri 2.45. It means that Rajganj has higher attendance ratio than Jalpaiguri. The difference is statistically significant.

**4.** The opinion of teachers of the surveyed schools indicated that there was a moderate impact of MDM on the study behaviour in urban and rural schools in Jalpaiguri District. The ratio of increment in the children study behaviour in Jalpaiguri was more than Rajganj children's study behaviour. Approximately 60 per cent of teachers in Jalpaiguri was agreed that study

behaviour during MDM scheme had increased followed by 32.5 per cent in Rajganj, while from chi-square test it was found that teacher's opinion has a significant difference between study behaviour and location of the schools.

The outcome of independent sample t-test conducted from the primary survey and indicated that, Since the p-value is less than 0.05 for an increase in study behaviour, the null hypothesis is rejected at a five per cent level of significance. Based on the mean score, it is found that mean value in respect of the increase in study behaviour of Rajganj is 1.93 and that of Jalpaiguri 2.35. It means that Jalpaiguri has a higher ratio than Rajganj. The finding is in agreement with the results of J. Davis McCracken and Jeff David(1991) and David E Cox and E. Sproles (1998) who found that urban and rural schools differ in respect of aspiration and learning behaviour of the students in the study.

5. The opinion of the teachers indicates that there was a different impact of quality of MDM between sample areas. Approximately 75 per cent of the teachers (out of 80) have perceived that that quality MDM is being served in Jalpaiguri (urban) is sufficient. But the ratio of increment was found higher in Rajganj (Rural) was 87.5 per cent. Based on the row and column percentage only 13.80 per cent of teachers in Jalpaiguri have expressed their disagreement concerning the quality of MDM whereas 7.5 per cent of teachers in Rajganj has a low level of agreement about quality. The Chi-square obtained proved that respondents feel that there is no significant difference in location of the school and quality of MDM.

The outcome of independent sample t-test conducted from the primary survey and indicated that, Since the p-value is more than 0.05 for the quality of MDM, the null hypothesis is accepted at five per cent level of significance. Based on the mean score, it is found that mean value in respect of quality at Rajganj is 2.80 and that of Jalpaiguri 2.61. It means that Rajgunj maintained a higher ratio than Jalpaiguri and concluded that there is no significant difference between rural and urban schools w.r.t quality. The above findings are in agreement with N.Singh, and Chhaya Badiger( 2016) study on the opinion of rural school about MDM programme and they found out that large majority of the teachers had most favourable opinion about MDM.

6. The opinion of the teachers indicates that there was a different impact of the quantity of MDM provided to students. Only 3.75 per cent of the teachers (out of 80) have admitted that that quality MDM is insufficient, being served in Jalpaiguri (urban). But the ratio of was found little higher in Rajganj (Rural) was 13.75 per cent. Based on the row and column percentage 73.75 per cent of teachers in Jalpaiguri have expressed their agreement in respect to the sufficiency of MDM whereas 75 per cent of teachers in Rajganj has a high level of understanding about quantity. The Chi-square proved that respondents feel that there is a significant difference in location of the school and quantity of MDM severed.

The outcome of independent sample t-test conducted from the primary survey and indicated that, Since the p-value is more than 0.05 for the quantity of MDM, the null hypothesis is accepted at five per cent level of significance. Based on the mean score, it is found that man value in respect of quality at Rajganj is 2.6125 and that of Jalpaiguri 2.70. It means that Jalpaiguri maintained a higher ratio than Rajganj and concluded that there is no significant difference between rural and urban schools w.r.t quantity of MDM.

But there are the different opinion of stakeholders regarding the quality of MDM in Jalpaiguri and Rajganj. It has been found that 18.75 of the parents in Jalpaiguri were satisfied with the quality of MDM supplied whereas 37.5 per cent has expressed their low opinion about quality. Whereas 35 per cent of the parents in Rajganj were confident with the quality of MDM provided whereas 21.25 per cent have expressed their low opinion about the quality of MDM

7. It was found that 64 (80 per cent) teacher perceived that an increase in girl's enrolment had been affected due to the introduction of MDM in Rajganj followed by 67(83.8 per cent) in Rajganj. Based on the row and column percentage 11.25 per cent of teachers in Jalpaiguri have expressed their disagreement in respect to increasing in girls enrolment of MDM whereas 5 per cent of teachers in Rajganj has a low level of agreement about this. By chi-square testing procedure, it is revealed that there is no significant difference between Jalpaiguri and Rajganj in context to girl's enrolment. So, we can conclude there is no such association between the location of the schools (rural and urban) and teacher's perception

regarding the increase in girls' enrolment which has an overall impact on SSA. Hence MDM works as a motivating factor for the girl's enrolment.

The outcome of independent sample t-test conducted from the primary survey and indicated that, since p-value is more than 0.05, the null hypothesis is accepted at five per cent level of significance. Based on the mean score, it is found that mean value in respect of girl's enrolment at Rajganj is 2.78 and that of Jalpaiguri 2.69. It means that Rajganj maintained a higher ratio than Rajganj and concluded that there is no significant difference between rural and urban schools w.r.t girls enrolment.

8. The opinion of the teachers indicates that there was a positive impact of MDM on nutritional and education level. It was found that 72 (90 per cent) teacher perceived that positive impact of education and nutritional had been affected due to the introduction of MDM in Rajganj followed by 66 (82.5 per cent) in Jalpaiguri. Based on the row and column percentage 11.20 per cent of teachers in Jalpaiguri has expressed their disagreement whereas 5 per cent of the teachers in Rajganj have a low-level perception in respect to increase in nutritional and education support after the implementation of MDM.

The outcome of independent sample t-test conducted from the primary survey and indicated that, Since the p-value is more than 0.05 for nutritional and education status, the null hypothesis is accepted at five per cent level of significance. Based on the mean score, it is found that mean value in respect of nutritional and education status at Rajganj is 2.851 and that of Jalpaiguri 2.712. It means that Rajganj a higher ratio than Rajganj and concluded that there is no significant difference between rural and urban schools w.r.t nutritional and education status.

Based on the mean score, in teacher's opinion, Jalpaiguri have more perception on study behaviour (2.37), quality (2.70) and nutritional and education (2.71) than Rajganj

## **8.5 Significant findings of the study based on the opinion of stakeholders (teachers and students) towards the civil works in achieving the Education For All**

**1. School building-**It was observed from the field survey that all the schools have own pucca or semi pucca building in Jalpaiguri district. Zone wise department of Disaster Resistant Structure as per National Building Code has made, and Jalpaiguri falls under Seismic Zone IV which is known as severe intensity zone. For this, a school building must be designed with a frame structure, and square RCC column is considered. But it was found that the majority of the schools in our survey are very old, and the conditions of the buildings are not as per standard. It was found that almost 65% of the surveyed schools were established before 1970. It was seen that 33% in Rajganj and 47% in Jalpaiguri schools were of a tin shed and rest cases it was of RCC frame. Ceiling fans were also not available in the majority of the schools. In 40 sample schools in Jalpaiguri, only 7 schools (17.5 per cent) were found with the classroom more than 5 as compared to 5 schools (12.5 per cent) in Rajganj.

**2. Classrooms and furniture:** It was observed that 60 per cent of schools in Jalpaiguri requires major repair as against 92.5 per cent in Rajganj. Some kind of wooden furniture were available in the schools, but the condition was deplorable. In some schools, students were asked to sit on the floor and in the winter season mattresses were provided have been torn out. In general, availability of space is the major issue in every school. Student studying in different lower classes are asked to sit in a single class and managed by a single teacher. Primary schools should have at least two rooms with a veranda. But in most of the schools in our surveyed area, classes are separated by Chapra (partition made of bamboo). By, this the atmosphere in the classroom makes noisy and students lost concentration in the study and can not follow their teachers.

**3. Toilet facilities:** Toilet and urinal facilities are available in almost all the schools in Jalpaiguri and Rajganj, but some schools were found girl's toilet unlocked. It was found that not a single school has the provision of CSWN toilet facility under r the study.

**4. Maintenance Grant-**It was observed that all the schools surveyed in Jalpaiguri and Rajganj had received grant Rs.5000/10,000 during 2016-17. All the schools have utilised the grant and utilisation certificate have sent to DPO.

**5. Computer facility-**Since 2011-12, Sarva Siksha Mission of West Bengal in collaboration with Birla industrial % Technological Museum(BITM) has been conducting computer Aided Learning (CAL) of all district of West Bengal. It was found not a single school has the provision of a computer facility.

**6. Drinking water:** From the primary survey, it was found that not a single school have the provision of water purifier facilities, but some schools have 85 per cent tap water facilities in Jalpaiguri, and in Rajganj, 90 per cent of the schools are dependent on hand pump facilities. It was found that the sample area especially Rajganj is the major contributor in the production of tea and jute. The use of pesticide and other chemicals are the cause of polluted water. So, urgently need a water purifier system in the schools to avoid the water from tube well and pumps. Out of 80 schools, 2 schools from Rajganj reported about the acute scarcity of water in the summer seasons.

**7. Children with Special needs-**It was found that out of 40 schools surveyed in the Jalpaiguri Municipality, 14 (35 per cent) schools have the facilities of the ramp as against 8 (20 per cent) in Rajgunj. 7 number in Jalpaiguri and 13 numbers children are receiving education by physically disabled children. But not a single school has organised a counselling session with those children's parents/guardians.

**8. Cooking Utensils-**In all schools cooking utensils were found sufficient and clean. Cooking utensils were appropriately washed by the cooks or helper.

**9 Attendance:** Attendance is the primary concern in the schools especially in Jalpaiguri municipality. It was found that on an average of 40 to 50 per cent of students were present on the day of the visit. Majority of the low attendant students belongs to a socio-economic weaker section of the society. It was found that the larger section of this category used to work in their school time for a consideration of Rs.50 to 100 per day. Low income, illiteracy or ignorance of guardians or parents, lack of proper guidance and counselling, academic atmosphere are some of the reasons for low attendance.

Distance is the one of the major concern for attendance for primary school children in Rajganj. As the transportation facility is not sufficient, students had to attend schools by walking or with the help of parents. As per the opinion of the students, they cannot follow the class lesson due to their low attendance, and they do n't feel enthusiastic to attend the

schools. The medical check-up is carried in almost 30 per cent of the schools in both of the sample area. poor health and illness are the reasons for low attendance.

The opinion of the students indicates that Pearson chi-square value is 0.078 which is more than cut off value 0.05 at 95 per cent confidence level. Therefore the null hypothesis is accepted, and it can be said that there is no significant association between gender and attendance in schools at Jalpaiguri. Likewise, the calculated value of chi-square 1.824 is less than table value at p-value 0.610 which is more than 0.05. Therefore the null hypothesis is accepted, and it can be concluded that there is no significant association between gender and attendance in schools at Jalpaiguri.

**10. Enrolment-**The overall enrolment at the elementary level has increased and but it was observed that 17 schools (out of 40) in Rajganj reported about the decline rate of enrolment in 2016-17 in comparison to the previous year 2015-16. Likewise, 21 schools in Jalpaiguri (out of 40) responded about the decline rate of enrolment. Two schools in Jalpaiguri were found with total students in primary schools less than 20. Due to a decrease in enrolment, the pupil-teacher ratio has increased.

It was found that out of 40 schools samples in Rajganj, enrolment in 22 schools have declined in 2016-17 in comparison to 2015-16

It was observed that the availability of private schools with all basic and modern (computer, smart class) facilities is the main cause of declining enrolment in Govt. primary schools. The language also plays a crucial role in primary education. Elegant building with well-equipped class, attractive uniform and participation in all extra co-curricular activities act as a motivating factor for the capable parents to enrol their children in private schools. With the improving economic conditions of the parents/guardians, lack of physical facilities, traditional and old syllabus, feedback system encourages the parents to incline towards private schools.

**11. Other Provisions:** From the primary survey, information regarding various facilities are discussed below:

**i) Available of Electricity:** About 30 of the schools in Rajgunj are found without electricity, and all the schools in Jalpaiguri are found with electricity.

**ii) Separate toilet facility of the staff:** Almost 90 per cent of the schools under the study did not have the provision for a separate toilet for the staff.

**iii) Playground facility:** only 19 schools (47.5 per cent) and 16 schools (40 per cent) of the schools have the facility of playground respectively in Jalpaiguri and Rajganj. In most of the schools, there are no sports and games materials in schools except some swings which are also not maintained properly. No primary schools had the facility of the gymnasium.

**iv) TLM-** As a whole TLM was found satisfactory in almost all the schools and teachers are well qualified with a satisfactory level of teaching. In Jalpaiguri, approximately 57 per cent of schools were found with teachers more than three with post graduation qualification and 37 per cent in Rajganj.

**12. Sarva Siksha Abhiyan** has contributed significantly in developing elementary education in the district. About 100 per cent of schools have own school building 61.86 percentage of schools in the district have ramp facilities, and 12.67 per cent of schools have the facilities of the headmaster room.

Under the present study, approximately 21 per cent of schools in Jalpaiguri have the facility of a separate room for Headmaster/head teacher as against 19 per cent in Rajganj

**12. Out of School:** Every child of the age of 6 to 14 shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education. It provided for children's right to free and compulsory admission, attendance and completion of elementary education. There are several provision in the Act like prohibiting corporal punishment, detention and expulsion which need to be highlighted to ensure that we move towards a system that is free from fear .Special training has been implemented in the district so that a child is directly admitted in a class appropriate to his or her age. In both the sample area, there are no such cases of out of school as per teacher's opinion.

**13. Provision of incentives and quality education-** Every child in all schools availed the benefit of school uniform and free textbooks.

## **8.6 Suggestions and Recommendations**

The main aim of the SSA was to ensure universal primary education to all children as to fulfil our constitutional commitment. The efforts were magnified in the 1980s and 1990s through

the introduction of several programmes. DPEP currently SSA is acting as a centrally sponsored scheme with state Government for Universalising elementary education across India. In this context present study has attempted to analyse and evaluate the SSA programme in Jalpaiguri Sadar and Rajgung . By the finding of research from the field survey, following suggestions and recommendations may be made.

1. Although the study revealed there is no such out of school children under the investigation, but students who are admitted in the schools their regular attendance and retention is a matter of serious concern. So frequent system of feedback with parents and communication should be made regularly and also board can be displayed in the school mentioning the student' name as the highest attendance achiever on a monthly basis. Reward system may be introduced for highest attendance . It will act as a motivator factor to attract the student in the school.

2. School environment does not mean only building and furniture, includes outside environment. School garden may act as an innovative teaching tool and techniques for teaching subjects like science or math. The NCF-2005 calls for a constructive approach to teaching and learning, where learner make sense of the surrounding around them. By introduction of a garden in the school, students will enjoy gardening activities which leads to developing multiple learning styles, improving environmental attitudes and also beautify the school environment.

3. School's inner physical structure should be attractive by making classroom well decorated and also sports and games materials should be available for children. Development of physical and mental health occur through physical activities. Play activities should be more encouraged to fulfil the objectives of SSA.

4. Teaching methodology should be re-constructed through "critical pedagogy". The teaching of science and mathematics should be done from everyday mathematics from daily life. It will help children to develop self-confidence and decision making.

5. The community is a wealthy source of learning and participation in education. Every community carries a wide range of knowledge and skills in the form of stories, songs and poems. By involving them actively in SSA, upliftment of primary education would be more effective.

6. Computer-aided learning education should be introduced, and it will help them to develop self-learning.

7. Due to less financial assistance from Central Govt, it is challenging for the school to provide full launch with this insufficient money. Fake enrolment are being done to manage MDM. Government agencies should adopt proper monitoring and control system. For effective implementation of MDM a committee should be formed comprising Govt .official. Parents, local community members.

8. Clean water (water purifier), sanitation (washing hands), and hygiene need to be promoted vigorously. Headmaster, cook and other community members must look into the matter and duty of them to establish the fact that MDM is sanitary and safe. The separate dining hall is very much necessary to make sense that MDM is their right . With this hygiene issues, nutritional standards of the menu should be checked monthly

9. Government and authorities have to procure food grains at a lower cost. Quality is the major issue in all schools due to the inferior quality of food grains.

10. To develop leadership and self-confidence, the formation of “Children Council” is recommended to carry out different school activities. Separate post (like the prime minister, Environment minister, the sports minister, health minister etc.) may be created, and children will be elected for these post. Each minister is responsible for a particular job. By these practices, it will promote a better learning environment.

### **8.7 Suggestion for Future Studies**

The present study has an appraisal of SSA in the development of basic education in Jalpaiguri and Rajganj. The study has analysed the impact of MDM and also civil work facilities on UEE. Based on the analysis and findings, the following suggestion is made for future research

1. The present study was conducted in Jalpaiguri Municipality and Rajganj block. The findings, analysis and conclusions may not be universally valid. Therefore need for further

research for cross-validation of the reported results with samples from other areas of Jalpaiguri district.

- 2.** The study was conducted in Government Primary schools only. Comparison with private schools regarding various aspects may also be subject of future research.
- 3.** The present study was conducted on just 80 primary schools, 40 from each sample. For analysis, 360 students at primary level, 80 teachers and 60 parents were interviewed. It is therefore suggested that further research can be carried out on a large sample.
- 4.** Teaching methodology is one of the impotent factors for UEE. Hence student attitude toward learning achievement can be a prime area for future research.
- 5.** A study can be conducted to evaluate the effectiveness of MDM in the various tea garden of Jalpaiguri.
- 6.** Research can be undertaken to study the causes of the continuous decline of enrolment in Govt. Primary schools in Jalpaiguri.

# **BIBLIOGRAPHY**

## Bibliography

- A.Zaidi. (2000). *Provision and utilization of elementary education facilities in North East India : What DISE data reveals?* New Delhi: NIEPA.
- Afridi, F., Barooah, B., & Somanathan, R. (2013). School meals and classroom effort: Evidence from India. *Working paper, International Growth Center, London School of Economics and political Science* .
- Agarwal, Y. (1998, October). Retrieved March 25, 2015, from DISE:  
<http://www.dise.in/Downloads/Reports&Studies/Access%20and%20Retention%20Under%20DPEP.pdf>
- Agarwal, Y. (2000). *public & Private Partnership in Primary Education in India*. New Delhi: National institute of Planning and administration.
- Ali, J., & Akbar, M. (2015). pupils' satisfaction with School With Mid day Meal Programme. *British Food Journal, Vol 117* , 1933-1948.
- (2010). *Annual Status Of Education Report (rural)*. Mumbai: Pratham Resource Centre .
- Azim Premji Foundation. (2010, December). *Some Issues in School Education*. Retrieved Feb 2014, from [www.azimpremjifoundation.org](http://www.azimpremjifoundation.org):  
<http://azimpremjifoundation.org/content/education-india-%E2%80%93-context>
- Bajpai, N., & Goyal, S. (2004). *Primary Education in India: Quality and Coverage Issues*. Columbia: The Earth Institute of Columbia University.
- Bajpai, N., & Sangeeta, G. (2004). *Primary Education in India: Quality and Coverage Issues*. The Earth Institute ,Columbia University.
- Bajpai, N., Ravindra, H. D., & Jeffrey, D. S. (2005). *Scaling Up Primary Education Services in Rural India*. Columbia: The Earth Institute at Columbia University.
- Bandhopadhyay, M. (2016). *Present Status of Infrastructure Facilities in Schools in India: From National and State Level Perspective*. New Delhi: National University of Educational Planning and Administration.

- Bhunja, G. S., Shit, P. K., & Duary, S. (2012). Assessment of School Infrastructure at Primary and Upper Primary Level: A Geospatial Analysis . *Journal of Geographic Information System* , 412-424.
- Bland, J. and Altman, D. (1997) Statistics Notes: Cronbach's Alpha. *BMJ*, 314, 572. <http://dx.doi.org/10.1136/bmj.314.7080.572>
- Bonds, S. (2012). Food for Thought: Evaluating the Impact of India's Mid-Day Meal Program on Educational. University of California, Berkeley.
- Centre For Youth & Social Development. (2008). *5% Random Sample checking of DISE data 2007-08*.
- Chakraborty, Tanika and Jayaraman, Rajshri, School Feeding and Learning Achievement: Evidence from India's Midday Meal Program. IZA Discussion Paper No. 10086. Available at SSRN: <https://ssrn.com/abstract=2819367>
- Coelho, R., Fischer, S., & Mcknight, F. (2015). The Effects of Early Chronic Absenteeism on Third-Grade Academic Achievement Measures.
- Coulson, A. (2003). Implementing " Education for All" Moving from Goal to Action. A *Fondazione Liberal conference*. Milan,Italy.
- Das, A. (2007). How far have we come in Sarva Shiksha Abhiyan. *Economic & Political Weekly*, Vol 42, No 1 , 12-18.
- David L. Streiner (2003) Starting at the Beginning: An Introduction to Coefficient Alpha and Internal Consistency, *Journal of Personality Assessment*, 80:1, 99-103,
- Demir, K., & Karabeyoglu, A. Y. (2016). Factors Accociated With Absenteesim in High School. *Eurasin Journal Of Educational Research*, Issue 62 , 37-56.
- Deodhar, Y. S., Mahandiratta, S., Ramani, K. V., & Mavalankar, D. (2010). An evaluation of mid day meal scheme. *Journal of Indian School of political economy* , 33-48.
- Department of Adult, C. E. (2009). *SSM and Response of Girl Children to Elementary Education, A Study of Siliguri Educational District*. Siliguri: University Of North Begal.

Department of Aduly, Continuing Education, Extention & Field Outreach. (2008). *Impact of Civil Works Under SSM: A study of Siliguri Educational District*. Siliguri: ,NBU.

Department of School Education & Literacy. (2011). *Sarva Shiksha Abhiyan, Framework For Implementation, Based on the Right of Children to Free and Compulsory Education Act, 2009*. New Delhi: Ministry of Human resource Development.

Department of Information and Computing Sciences. (2016, November). *Research Institute for Information and Computing Sciences*. Retrieved December 2017, from Regression Analysis SPSS: <http://www.cs.uu.nl/docs/vakken/arm/SPSS/spss4.pdf>

Department of School Education and Literacy. (2015). *National Food Security Act ,2013*. New Delhi: The Gazette of India ,MHRD.

District Statistics & Evaluation Office. (2014). *Evaluation Report on SSA for Distrct Doda*. JAMMU & KASHMIR: , Planning & Development Department, GOVT. OF JAMMU & KASHMIR.

Dreze, J. (2004, May 8). Mid-Day Meals and Children's Rights. *Economic and Political Weekly* , pp. 1937-1938.

Educational Consultants India Ltd (EdCIL). (2014). *national sample survey of Estimation of out of School Children in the age 6-13 in India*. 2014: Social & research Institute.

Epstein, L. J., & Sheldon, S. B. (2002). Present and accounted for: Improving student attendance through family and community involvement. *The Journal of Educational Research*, 95 , 308-318.

*Factors Influencing School Attendance for Chronically Absent Students in the Sacramento City Unified School District (SCUSD)*. (2014, July). Retrieved April 2016, from [https://regionalchange.ucdavis.edu/sites/g/files/dgvnsk986/files/inline-files/N%20Erbstein%20Brief\\_Factors-Influencing-School-Attendance.pdf](https://regionalchange.ucdavis.edu/sites/g/files/dgvnsk986/files/inline-files/N%20Erbstein%20Brief_Factors-Influencing-School-Attendance.pdf)

Garg, M., & Mandal, S. K. ( July 2013). mid Day Meal For poor, Privatise Education For the Non-poor. *Economic & Political Weekly*, Vol XLVIII No 30 , 155-163.

Ghosal, B. (2008, August 17). School for scandal. *The Week* , pp. 38-40.

Govinda, R., & Varghese, N. (1993). *Quality of Primary Schooling in India: A case study of Madhya Pradesh*. Paris: International Institute for Educational Planning, U N E S C O I.

Hamid, Y., & Hamid, A. (2012). Mid-Day Meal Scheme and Growth of Primary Education: A Case Study of District Anantnag in Jammu and Kashmir. *Bangladesh e-Journal of Sociology*. Volume 9, Number 1. , 80-89.

IIM Kolkata. (2008). *monitoring and Evaluation Report for Maldah, Dakshin Dinajpur and Darjeeling*. MHRD.

Institute of Rural Research and Development. (May 2012). *An Assessment of Convergence of Sarva Shiksha Abhiyaan with Selected Central and State Government Schemes*. Delhi: National Resource Centre for Women, Ministry of Women and Child Development, Government of India.

Islam, R. (2014). *FIRST HALF -YEARLY MONITORING REPORT OF Mid Day Meal Scheme for the State of WEST BENGAL*. Sriniketan: Visva Bharati University,.

Iyengar, R., & surianarain, s. (2008). Education Policy and Practice: Case Studies from Delhi and Mumbai. *Economic & Political Weekly Vol 43 No-38* , 19-26.

Jain, P., & Dholakia, R. H. (2010, February 20). Right to Education Act and Public-Private Partnership. *Economic And Political weekly* , pp. 78-80.

Jain, S., & Mital, M. (2011, July). Assessment of 'Sarva Shiksha Abhiyan' in Sarvodaya Schools of Delhi. *INDIAN EDUCATIONAL REVIEW* , pp. 15-29.

Jenkins, R., & Barr, E. (2006). *Social Exclusion of Scheduled Caste Children From Primary Education in India*. New Delhi: UNICEF India.

(2013). *JOINT REVIEW MISSION ON MID DAY MEAL WEST BENGAL*. Kolkata: Govt. Of West Bengal.

Kaushal, S. (2009). *A Study of Best Practices in the Implementation of Mid-Day-Meal Programme in Rajasthan* . New Delhi: National University Of Educational planning & Administration.

Khasnadsis, R., & Chatterjee, T. (2007, June 2). Enrolling and Retaining slum Children in a Formal School- A Field Survey in Eastern Slum of Kolkata. *Economic and political Weekly* .

Khera, R. (2006, November 18). MDM in Primary Schools: Achievement and Challenges. *Economic & political Weekly* , pp. 32-45.

Kingdon, G. G. (2007, March). *Global poverty Research Group*. Retrieved March 22, 2016, from <http://www.gprg.org>: <http://www.gprg.org/pubs/workingpapers/pdfs/gprg-wps-071.pdf>

Kingdon, G. G. (2005). *Private & Public Schools in India*. London: Harvard University.

Kingdon, G. G. (2005). Private and Public Schooling. *Harvard University*, (pp. 5-15). London.

Knutson-Kolodzne, Jim S., "A Multiple Regression Analysis of Factors Concerning Satisfaction," (2017). Culminating Projects in Higher Education Administration. 13. [http://repository.stcloudstate.edu/hied\\_etds/13](http://repository.stcloudstate.edu/hied_etds/13)

Kumar, R. (2006). Equality,Quantity and Quality Mapping the Challenges before Elementary Education in India. In *The Crisis of Elementary Education in India* (pp. 13-56). New Delhi: Sage Publication.

Lack of Community Participation in the Sarva Shiksha Abhiyan: A Case Study . (2009, February 21). *Economic & Political weekly* .

Lall, M. (2005). *The Challenges for India's Education*.

Landau, S., & Everitt, B. S. (2004). *A handbook of statistical analysis using SPSS*. CHAPMAN & HALL/CRC.

Lloyd W Fernald Jr ,George T Solomon and Gillian Doshna (2003), “ Small Business Training And Development In The United States By Years In Business”, *International Journal of Organisational Behaviour*, Vol.6 No.5, pp 347-363, ISSN 1440-5377

Mehendale, A. (2010, January 23). Model Rules for the Right to Education Act. *Economic & Political Weekly* , pp. 9-12.

Mehrotra, S. (2006). *The Economics of Elementary Education in India*. New Delhi: Sage Publication.

Mehta, A. C. (2005). *Drop Out Rate At Primary Level :A Note Based on DISE 2003-04 & 2004-05 Data*. New Delhi: National Institute Of Educational Planning and Administration (NIEPA).

Ministry of Human Resource Development. (2015). *Guidelines on Food Safety and Hygiene for School Level Kitchen under Mid day Meal*. Department of School Education and Literacy (MDM Division).

Ministry of Human Resource Development. (2015). *Report No. 36 of 2015 - Performance Audit on Mid Day Meal Union Government*, . Comptroller & Auditor general Of India.

Ministry of Human Resource Development. (June,2014). *The Right of Children to Free and Compulsory Education Act, 2009*. New Delhi: Department of School Education and Literacy.

Mohanty, S. (1985). *Universalization Of Primary Education in India: Lesions of Experience & Pointers For Action*. Paris: UNESCO.

Narayan, V. (2010, February 6). The Private and the public in school Education. *Economic & political Weekly* , pp. 23-28.

National Council of Educational Research & Training. (2002). *Education Policies and curriculum at the upper primary and secondary education levels*.

National council of Educational Research and Training. (2016). *All India School Education Survey*. New Delhi: National Council of Educational.

National Institute Of Educational Planning and Administration. (2008-09). *Elementary education in India, District Report Card* . New Delhi: Department of School Education And Literacy, MHRD.

National Institute Of Educational Planning and Administration. (2008-09). *Elementary Education in India: Progress Toward UEE*. New Delhi: Department of School Education And literacy.

National University Of Education Planning and Administration (NUEPA). (2014). *Education For All: Towards Quality with Equity*. New Delhi: National University of Educational Planning and Administration, MHRD.

P.Schwab, D. (1999). *Research Methods For Organizational Studies*. London: Lawrence Erlbaum Associates.

Pal, Sarmistha, 2009. "Public Infrastructure, Location of Private Schools and Primary School Attainment in an Emerging Economy," *IZA Discussion Papers* 4572, Institute for the Study of Labor (IZA).

Pande, R., & Malhotra, A. (2006). *Son Preference and Daughter Neglect in India*. New Delhi, India: International Center for Research on Women. All.

pandey, A. p. (2006, October 30). Retrieved June 2015, from Munich Personal RePEc Archive: <https://mpra.ub.uni-muenchen.de/622/>

Paschim Banga Sarva Shiksha Mission. (2009). *ANNUAL REPORT 2008-09, SARVA SHIKSHA ABHIYAN, WEST BENGAL*. Kolkata: Paschim Banga Sarva Shiksha Mission, Govt Of West Bengal.

Paschim Banga Sarva Siksha Mission. (2014). *Annual Report 2013-14*. Kolkata: Department of School Education, Govt. of WB.

Plotts, Timothy, "A Multiple Regression Analysis of Factors Concerning Superintendent Longevity and Continuity Relative to Student Achievement" (2011). Seton Hall University Dissertations and Theses (ETDs). 484. <http://scholarship.shu.edu/dissertations/484>

Pratham. (2014). *ANNUAL STATUS OF EDUCATION REPORT*. New Delhi .

Pratichi (India) Trust . (2002). *The Delivery Of Primaru Education*. Delhi: TLM Books.

Pratichi Institute. (2012). *The Sarva Siksha Mission in North Bengal Progresses and Challenges: A Report on the implementation of Sarva Siksha Mission in North Bengal Districtsa*. Kolkata: Pratichi (India) Trust.

Pratichi Institute, Pratichi (India) Trust. (2013). *Status of Elementary Education in the states of Assam, Jharkhand, Mizoram, Odisha and Tripura*. Kolkata: Pratichi Institute, in association with UNICEF.

Pratichi Research Team. (2010). *The Pratichi Report on Mid-Day Meal: The Mid-Day Meal Programme in Urban Primary and Rural Upper Primary Schools in West Bengal*. Delhi: Pratichi (India) Trust.

Programme Evaluation Organisation. ( June,2010). *Evaluation Report On Sarva Shiksha Abhiyan*. New Delhi: Planning Commission,GOI.

purkait, B. R. (2015). *Milestones in Modern Indian education*. Kolkata: New Central Book Agency(P) Ltd

Rajasekar, S., Philominathan, P., & Chinnathambi, V. (n.d.). Retrieved June 2015, from <https://arxiv.org/pdf/physics/0601009.pdf>

Rajshri, J., Dora, S., & V Francis De V, E. (2005). *The Impact of School Launches on Primary School Enrolment: Evidence From India Midday Meal Scheme*. Retrieved June 2015, from [https://www.isid.ac.in/~pu/conference/dec\\_10\\_conf/Papers/RajiJayaraman.pdf](https://www.isid.ac.in/~pu/conference/dec_10_conf/Papers/RajiJayaraman.pdf)

Rana, K. (2004). *The possibilities of Mid day meal Programme in West Bengal*. Kolkata: Centre For Social science.

Rana, K., & Das, S. (2004). Primary Education in Jharkhand. *Economic and political weekly* ,Vol 39, Issue 11 , 123-135.

Rao, N. (2009, April 18). Structural Constraints in sarva Shiksha Abhiyan Schools. *Economic & Political Weekly* .

Rao, V. S. (2009). Lack of Community Participation in the Sarva Shiksha Abhiyan: A Case Study. *Economic & Political Weekly VOL 44 No. 08* , 61-64.

(2002). *Reaching & Educating At-risk Children*. New Delhi: United States Agency for International Development.

Research ,Evaluation & Studies Unit. (2007). *Study of Students' Attendance in Primary & Upper primary Schools*. New Delhi: Edcil (india) Limited.

Robert A. Opoku (2006), "Gathering customer feedback online and Swedish SMEs", Management Research News Vol. 29 No. 3, 2006 pp. 106-127

Rustagi, P., & Menon, R. ( Dec., 2013). Literacy & Elementary Education Status in Jharkhand:Challenges to Universalisation. *Journal of Economic & Social Development* ,Vol - IX, No. 2, , 41-57.

Samal, J. (2014). Mid Day Meal Menace in Bihar: The Public Health Concerns of the. *International Journal of Advanced Nutritional and Health Science* , 48-51.

*sarva Shiksha Abhiyan: framework For implementation.* (2011). Delhi: Department of School Education and Literacy.MHRD,GOI.

Sekhar, S., Nair, M., Prabhakar, K., & Rao, P. (2009). *Study Of Sarva Siksha Abhiyan Initiatives On UEE in Karnataka With Special reference to Quality and Equity.* Bangalore: Public Affairs Centre.

Sen, A. (2005). *Deficiencies of primary education in India.* Retrieved November 2016, from [www.pedocs.de](http://www.pedocs.de):

[https://www.pedocs.de/volltexte/2013/6110/pdf/ZEP\\_1\\_2005\\_Sen\\_Deficiencies\\_Primary\\_Education.pdf](https://www.pedocs.de/volltexte/2013/6110/pdf/ZEP_1_2005_Sen_Deficiencies_Primary_Education.pdf)

Sen, A. (2009). *Primary Schooling.* Kolkata: The Telegraph.

Sharma, S., Passi, S. J., Thomas, S., & Gopalan, H. (2006). *Evaluation of Mid Day meal programme in MCDs School.* Delhi: Municipal Corporation of Delhi and Nutrition Foundation of India.

Shukla, S. (2014, February 15). Mid Day Meal: Nutrition on Paper, poor Food on the plate. *Economic & Political Weekly* , pp. 51-58.

Society for Socio-Economic Studies & Services (SSESS). (2010). *Report on post enumeration survey of DISE data (2009-10) of Bankura, Bardhman, Birbhum, Murshidabad, Nadia , Paschim Medinipur & Puri;iya (Seven Districts ) In West T Bengal* . Kolkata: Paschim Banga Sarva Shiksha Mission (PBSSM).

State Council for Educational Research & Training (SCERT). (August 2014). *Study of Impact of Mid-Day Meal (MDM) Programme on School Enrolment & Retention.* Uttar Pradesh, India: Mott MacDonald,.

The New Segregation Reflections on Gender and Equity in Primary Education. (2002, April 27). *Economic and Political Weekly* , pp. 1600-1631.

The PROBE Team. (1998). *Public report on Basic Education in India*.

United Nations Educational, Scientific and Cultural Organization. (2015). *Educator For All 2000-2015: achievements and challenges*. France: UNESCO Publishing.

Virginia Department of Education. (2005, August). *Improving School Attendance: A Resource Guide for Virginia Schools*. Retrieved November 2016, from [http://www.doe.virginia.gov/support/prevention/attendance-truancy/improving\\_school\\_attendance.pdf](http://www.doe.virginia.gov/support/prevention/attendance-truancy/improving_school_attendance.pdf)

ward, M. (2006). *Rural Education*. NCERT.

Zsuzsanna,T & Marian,L (2012), “Multiple regression analysis of performance indicators in the ceramic industry “,Procedia Economics and Finance,Vol 3 ( 2012 ) ,PP 509 – 514

## **Thesis**

Chauhan, Sudha Devi. “A study of mid day meal programme in the government primary schools of the gwalior city of madhya Pradesh”.Thesis. Maharaja Sayajirao University of Baroda,2011, Shoudhganga web 13<sup>th</sup> January,2015  
<[shodhganga.inflibnet.ac.in/handle/10603/32826](http://shodhganga.inflibnet.ac.in/handle/10603/32826)>

Tarananum “Effects of mid day meal scheme on enrolment and retention in primary schools of western Uttar Pradesh”Thesis, Aligarh Muslim University,2014, Shoudhganga web 2014  
<http://hdl.handle.net/10603/166120>

Anbumani , Arumugam. “Mid day meal scheme in Chennai City Tamil Nadu A Study”,Thesis, University of Madras,Shoudhganga ,web  
<<http://hdl.handle.net/10603/191131>>

Biswas, Dipankar “A study of the educational impact of mid day meal scheme in primary schools of west Tripura district” Thesis, University of Calcutta,2016, Shoudhganga, web  
<http://hdl.handle.net/10603/172180>

Padhi, Rajashree “Right to food and mid-day meal scheme: a comparative study of Tamil Nadu and Orissa” Thesis. University of Hyderabad, 2009, Shoudhganga, web <<http://hdl.handle.net/10603/4244>>

S. Kaushal and S. S. Patra. (2009). Elementary Education in Bihar: Some Reflection of DISE Data. pp. 3-4. [Online]. Available: <http://www.dise.in/Downloads/Use%20of%20Dise%20Data/Savita%20Kaushal%20&%20%20Sudhanshu%20S.%20Patra.pdf> [3]

(2013). *JOINT REVIEW MISSION ON MID DAY MEAL WEST BENGAL*. Kolkata: Govt. Of West Bengal. Web <[mdm.nic.in/Files/Review/Fifth\\_Review/WB/West%20Bengal\\_JRM\\_Report.pdf](http://mdm.nic.in/Files/Review/Fifth_Review/WB/West%20Bengal_JRM_Report.pdf)>

Murad David Col Debella “ Construction delivery system: A Comparative Analysis of the performance of system within School Districts”, University of Pittsburgh, 2004 web < [http://d-scholarship.pitt.edu/8220/1/ColdebellaD\\_Aug2004.pdf](http://d-scholarship.pitt.edu/8220/1/ColdebellaD_Aug2004.pdf)>

Singh, Bajinder (2015) “An evaluative study of Sarva Shiksha Abhiyan in Haryana” Thesis. Maharshi Dayanand University, Shoudhganga, web <<http://hdl.handle.net/10603/112448>>

Kanchan Rani (2016) “Implementation and performance evaluation of mid day meal scheme in Punjab a case study of Sangrur Barnala and Mansa districts”, Thesis, Sant Longowal Institute of Engineering and Technology, Shoudyhganga, web <<http://hdl.handle.net/10603/117867>>

Sharma Navneet (2018, September 13) “40% children in Punjab go to school on an empty stomach” Hindustan times, Retrieved from <<https://www.hindustantimes.com/punjab/>>

Cuellar, Kregg (2011) “Effect of collaborative teaching on the general education student population: A case study”, Thesis, University of Houston, web <<https://uh-ir.tdl.org/uh-ir/bitstream/handle/10657/277/CUELLAR-.pdf%3Bsequence=2>>

Frye, S. Andrew (2015) “Teachers’ Perceptions of the Literacy Coach’s Impact on Classroom Practice”, Thesis, Baker University, Web [https://www.bakeru.edu/images/pdf/SOE/EdD\\_Theses/Frye\\_Andrew.pdf](https://www.bakeru.edu/images/pdf/SOE/EdD_Theses/Frye_Andrew.pdf)

Desai.S. Swati (2012) “Application of statistical techniques in evaluation of the performance in the area of universalization of education”, Thesis, Tibrewala university, Rajasthan, web <http://shodhganga.inflibnet.ac.in/bitstream/1>

Waterman .A. Margaret (2016) “The Quality of Ph.D. and Ed.D. Educational Leadership Dissertation Methods”, Thesis, Baker University, web [https://www.bakeru.edu/images/pdf/SOE/EdD\\_Theses/Waterman\\_Margaret.pdf](https://www.bakeru.edu/images/pdf/SOE/EdD_Theses/Waterman_Margaret.pdf)

Srivastava. S (2014) “A Study of the Impact of Customer Care Services on Customer Satisfaction of Mobile Phone Subscribers of UP East Circle”. Thesis, IFTM University, Shoudhganga Web <http://hdl.handle.net/10603/31398>

Rajandran K V R (2012) “Enterpreneurship development: a study on Pura scheme villages in Thanjavur district Tamil Nadu India”, Thesis, Periyar Maniammai University, Shoudhganga , web <http://hdl.handle.net/10603/4148>

Daniels .L.E. Jean (2016), “Ethics education in marriage & family therapy”, Virginia Polytechnic Institute and State University, Thesis, web < <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.411.212&rep=rep1&type=pdf>>

K. Warner Sandra (2015), “Student Perceptions of a Doctorate in Educational Leadership Program (2006-2014)” University Missouri Kansas City, thesis web < [https://www.bakeru.edu/images/pdf/SOE/EdD\\_Theses/Warner\\_Sandra.pdf](https://www.bakeru.edu/images/pdf/SOE/EdD_Theses/Warner_Sandra.pdf)>

Jabade.M. Suvarna (2015), “Impact Of HRD Practices On Quality Of Work Life Of Employees In BPO Industry In Pune” Shivaji University, Thesis, Shoudhganga , web < <http://hdl.handle.net/10603/149739>>

## **Website**

<http://udise.in/drc.htm>

<http://schoolreportcards.in/>

<http://www.ssa.tn.nic.in>

<http://mdm.nic.in/>

<http://censusindia.gov.in/>

<https://mdm.wbsed.gov.in/>

<http://www.asercentre.org/>

<http://www.nuepa.org/New/>

<https://mdm.wbsed.gov.in/>

<http://www.educationforallinindia.com>

<http://www.un.org/millenniumgoals/>

<sup>1</sup> <http://mdm.nic.in/Ministry> of Human Resource

<https://www.akshayapatra.org/mid-day-meal-programme-implementation><http://pib.nic.in>

(Mid day meal and National food security Act 2013)

## INDEX

### A

Attendance 3,10,12,18,19,20

### B

Barrier free access 14,47

### C

Children with special needs (CWSN) 16,160,192

Civil works 7,12,22,39,49,76,156,158

### D

DISE 158,161,165

District Primary Education Project (DPEP) 2,196,199

Drinking water 3,14,15,17,18,22,30,38,41,,45,86

Drop out 91,95,132,133

### E

Education 140,142,144,156

Enrolment 2,4,5,10,11,12,19

### F

Facility 14,15,16,18,22,27,29,37,38,39,42,44,45,53,76 ,193,195

### G

Gross Enrolment 5,42,62

### H

Health 19,20,32,36,37,46,64,73,83,86,92,107,108,111,116

Hygiene 150,151,152

## **I**

ICDS 58,67,90,92,93

Income 20,30,34,38,40,47,64,74,117,178,193

Infrastructure 76,80,81,83,84,158

## **L**

Literacy 1,3,10,26,28,29,33,35,36,42,44,53,57,64,67,71,74,75,78,79,90

## **M**

Mid day meal (MDM) 90,91,93,95,96,97,98,101,104,105,107,108,110,111,113

## **N**

National policy on Education (NPE) 1,59

Net Enrolment 6, 62

Non formal education 2,58,60,61,63

Nutritional 61,63,85,91,92,93,95,96,97,98,132,139,140,142,144,176

## **O**

Out of school 6, 7,10,28,40,43,53,62,65,70,195,196

## **P**

Pratichi institute 205,206

## **R**

RTE Act 3,4,14,17,18,59,102

Rural 18,29,30,31,33,35,36,42,43,44,49,50,54,60,73,74,75,76,77,81,82,85,99,132

## **S**

Sarva Shiksha Abhiyan 2,3,7,13,22,24,26,35,39,67,90,97,156,159

Satisfaction 46,76,85,112,144,145,146,147,178,179,180,181

# Appendix-A

## Questionnaire for Students

### Responded Profile

Name: \_\_\_\_\_

Age: \_\_\_\_\_

Sex: \_\_\_\_\_

Class: \_\_\_\_\_

School Name \_\_\_\_\_

Do you eat/ participate MDM in the school everyday?

Do you get mid day meal regularly?

Do you left any food after MDM? Daily \_\_\_\_\_ Sometimes \_\_\_\_\_ Rare \_\_\_\_\_

Du you satisfy with MDM? Satisfy (High) \_\_\_\_\_ Satisfy (low) \_\_\_\_\_

SDA-Strongly disagree, DA (Disagree),3 (undecided),4 (Agree) ,5 (strongly agree)

Sl. No	Statement	1(SDA)	2 (DA)	3(undesided/Don't know)	4(A)	5 (SA)
1	Before I come to school,I have taken breakfast (Empty stomach or not)					
2	I come to school everyday					
3	The Mid day meal is provided timely					
4	I satisfy with the MDM					
	Hygiene MDM is provided in the school while serving and cooking					
5	The kitchen store is clean and adequate for cooking					
6	I feel illness/ health problems after MDM					
7	There is a provision of pure drinking water					
8	I feel ill after taking MDM in the school					

9	The MDM is tasty					
10	I wash my hands with soap before taking the MDM					
11	I feel full stomach after mid day meal					
12	There is provision of clean dining area facilities in the school					
13	Sufficient quantity of MDM is served in the schools					
14	MDM provided in the schools are in good quality					
15	Condition of the class room are satisfactory					

## Questionnaire for Teacher

### Mid day Meal Scheme in Jalpaiguri Municipality

Respondent No-

Name:

SEX:

category of the school:

Name of the school:

SDA-Strongly disagree, DA (Disagree),3 (undecided),4 (Agree) ,5 (strongly agree)

Sl. No	Statement	1(SDA) Never	2(DA) occasionally	3 Undecided	4( A)	4 (SA) Everyday
1	Mid day meal is provide timely					
2	Nutrition and education both increased after the implementation of MDM					
4	MDM effects on increase in Girls enrolment.					
5	MDM provided in the schools are in good quantity and sufficient.					
6	Food grains are sufficient for all children					
7	MDM provided in the schools are in good quality.					
9	MDM influences in reduction in drop out					
10	MDM influences in Increase in Enrolment					
11	MDM influences in Increase in attendance					
12	There is an improvement in study behavior after the implementation of MDM					

## Questionnaire for Head Teacher or Teacher in charge

Respondent No-

Name:

SEX:

category of the school:

1.Name of the school with year of establishment:

2. Name of the Village/Town/Area:

3. Total students in 2016:

4.No teachers in 2016:

5 a) Numbers of class room:

b) Number of class rooms require major repair-

6. Number of teachers in primary:

7.Is there separate toilet facility for girls?-

8 a)Whether the schools receive development or maintenance grant?

B If yes, mention the amount of grant

9.In there any medical checkup facility in the school?

10.Is there any boundary wall in the schools?

11 Is there any playground facility in the schools?

12.a) Is there is any provision of drinking water facilities?

b) If yes, source of water

i) tap water

ii) Hand pump

iii) well

13. Is there any water purifier in the schools?

14.Is there ant separate room for Headmaster or head teacher?

15. Infrastructure score

SL.No	CIVIL WORK FACILITIES	score value		
		2	1	0
		GOOD	FAIR	POOR
1	Availability of class room adequate			
2	Condition of the class room good			
3	Space of the room Adequate			
4	Grant adequate for toilet			
5	Grant adequate for class room			
6	Availability of computer Facilities			
7	Furniture for students sufficient			
8	CWSN Facility			
9	TLM facilities Adequate			
10	Provision of drinking water			

#### 16. Hygiene Questionnaire

SL.No	Hygiene Issues			
		Always	Sometimes	Rare
1	Purchase of AGMARK quality Rice,dal,etc			
2	Purchase of fresh vegetables			
3	Physically verification of raw materials			
4	cooking must be done with low lid			
5	Testing of the food by the teacher			
6	The kitchen and the cooking areas should be cleaned			
7	Cook and helper should be aware of personal hygiene and by annual health check up should be necessary			
8	Continuous supply			

	of water in the schools			
9	Purchase of AGMARK quality Rice,dal,etc			
10	Purchase of fresh vegetables			

# Questionnaire for Parents

Responded No. \_\_\_\_\_

Date \_\_\_\_\_

1. Name of the Respondent

2. Age

3. Sex

4. Name of the Village (Rural) / Ward No (Urban)

5. Number of Children

6. Do your child take MDM in the school? YES \_\_\_\_\_ NO \_\_\_\_\_

7. What type of meal is served to your children in school

a) Dry Food b) Cooked meal c) Others

8. on an average how many days a week your child goes to school?

a) Everyday (Except holidays) b) Frequently (4-5 days) c) Occasionally (2-3 days) d) Rare

9. On an average how much you have earned in a month?

a) upto Rs.5000 b) Rs5,000 -10,000 c) Rs.10,000 -15,000 d) Above Rs.15,000

10. Whether the school has the facilities of drinking water?

11. Whether MDM encouraged the parents/ guardians to send the schools regularly?

12. is there any PTA association in the schools? Yes \_\_\_\_\_ No \_\_\_\_\_ Don't know \_\_\_\_\_

13. Do you think that MDM should be continued? Yes \_\_\_\_\_ No \_\_\_\_\_ Don't Know \_\_\_\_\_

Sl. No	Statement	1(SDA)	2 (DA)	3(undesided/Don't know)	4(A)	5 (SA)
1	I feel satisfy with MDM					
2	The Quantity of MDM served is sufficient					
3	The Child suffers from illness frequently					
4	Quality of MDM is served to the students is good					
5	Hygiene is maintained while cooking and serving MDM					

## Appendix-B

OFFICE OF THE  
**JALPAIGURI DISTRICT PRIMARY SCHOOL COUNCIL**  
JALPAIGURI

Memo No. ७७०

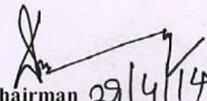
Date. 29-04-14

From : **The Chairman**  
**District Primary School Council,**  
**Jalpaiguri.**

To : Sri. Arindam Metia.  
Assistant Prifessor.  
North Bengal St. Xavier College.  
University of North Bengal.

**Sub.:- Permission to visit stipulated Primary Schools for data collection.**  
**Ref.:- His prayer dtd. 29.04.2014.**

With reference to the above, the undersigned has to inform him that this Council has "No-Objection" if he gathers data through questionnaire, purely based on sample survey from the Head Teacher/ Head Mistress, Teachers and also from the students of the **stipulated Primary Schools** for his Thesis on the title "*The Role of Sarva Shiksha Abhiyan in Achieving Education for All (EFA) : a STUDY OF Rural & Urban areas of Jalpaiguri District*" under University of North Bengal **without hampering normal teaching procedure and normal school duties.**

  
Chairman 29/4/14  
District Primary School Council  
Jalpaiguri

Memo No. ....

Date. ....

Copy forwarded for information to :-

1. The Sub-Inspector of Schools, Sadar East Circle, Sadar North Circle, Sadar South Circle, Sadar West Circle, Rajganj Circle and Rajganj West Circle with the request to extend their co-operation to Sri. Arindam Metia, Assistant Prifessor, North Bengal St. Xavier College. University of North Bengal for the aforementioned survey.

**Chairman**  
**District Primary School Council**  
**Jalpaiguri**

Website - [dpscjalpaiguri.org](http://dpscjalpaiguri.org)

email - [dpscjal@gmail.com](mailto:dpscjal@gmail.com)

 03561-232035 'Nur Manzil' Buildings, D.B.C. Road, Jalpaiguri

 03561-231398

C:\Users\DPSC\Desktop\cc\permission for thesis\_29.4.14.doc

## APPENDIX C:

### LIST OF PUBLICATION

1. Metia, A. (September 2016). "Education for All" in Jalpaiguri with special reference to Infrastructure & RTE Act,2009:Current Status and Recent Initiatives. *Abhinav National Monthly Referred Journal Research in Arts & Education, Vol5, Issue 9* , pp. 1-7.

2. Metia, A., & Laha, S. D. (2010). Gender Disparity in Universalization of Elementary Education in West Bengal-Expanding Access with Equity. *South Asian Journal of Socio-Political Studies (SAJOSPS), VOL XI No,1* ,PP 73-76.

## Appendix-D

**Plate 1 mid day meal distribution in patkata Moralpara Primary school, Jalpaiguri**



**Plate 2 Class Room (Class-IV) Deshbandhoo Nagar R.R No-II, Jalpaiguri**



**Plate 3 Class Room (class II),Mantadari BFP ,RAJGANJ**



**Plate 4 Class Room ( Class III) FATAPUKUR PRYMARY,RAJGANJ**



**Plate 5 Class Room (class II),NARESH CHANDRA SMRITI  
PRIMARY,JALPAIGURI**



**Plate 6 Class Room (Class III), SHIKARPUR PRIMARY,RAJGUNG**





---

Published by: Abhinav Publication

***Abhinav National Monthly Refereed Journal of Research in  
Arts & Education***

---

**“EDUCATION FOR ALL” IN JALPAIGURI WITH SPECIAL  
REFERENCE TO INFRASTRUCTURE & RTE ACT, 2009:  
CURRENT STATUS & RECENT INITIATIVES**

**Arindam Metia**

Assistant Professor

Deptt. of Commerce,

North Bengal St. Xavier's College,

Jalpaiguri, India

Email: arindam.metia@gmail.com

---

**ABSTRACT**

*Several programmes were designed to achieve the goal of universalization of elementary education (UEE) which is based on multiple factors. Infrastructure or civil works is one of the major parameters to influence the Sarva Shiksha Mission (SSM) in achieving UEE. It is admitted that, effectiveness of the existing infrastructure for elementary education is the debatable & challenging issue. The present paper is an attempt to evaluate the role of civil works in SSM and also to emphasize the need for better infrastructure that would provide quality education in school centric environment. The entire analysis is based on the District Information system for Education(DISE) and school report card which are published by National University of Educational planning & Administration(NUEPA).*

*Besides, another legislation effort of Govt. of India is the introduction of “Right of Children to Free & Compulsory Education, Act 2009” (RTE Act) to secure the access to elementary education. The present paper also investigates, the comparative differences between west Bengal & Jalpaiguri in order to realize the implementation of the act in terms of difference performance indicators which are the most crucial of elementary education.*

**Keywords:** elementary education, infrastructure/civil works, RTE Act

**INTRODUCTION**

Discrimination in social and economic progress in any civilized society could be cracked by education. Education helps to develop functional & analytical ability for individuals'. Involvement in education do not only increase the efficient, it also helps to lead a quality and societal individual life. Elementary education is the base of our education system. During this period, students are encouraged to think independently and to develop basic values of social life. To achieve this, Government of India made constitutional right to provide free and compulsory education to all children until age of 14 in the year 1950. This policy was strengthened by the direct involvement of the Central Govt. through Sarva Shiksha Abhiyan (SSA) in the year 2001. But, of course State Government also played a very significant role in respect of sharing financial expenditure and implementing education goals under SSA. The amount of money spent on infrastructure, stipulated in SSA budget to 30% share in infrastructure and West Bengal allotted 18% of the SSA budget to the infrastructure and spent 90% of its allocation in the year 2013-14. Infrastructure resources are pre requisite to provide quality learning. According to National policy of Education 1986, Operational Blackboard was introduced to provide minimum basic facilities in the schools. Success of the schools were evaluated on the basis of some quantitative measures or

basic facilities in the schools. The minimum basic facilities like school building, drinking water facilities, girls' toilet, electricity etc are required for enhancing the learning environment of the school.

As infrastructure plays a very significant role to universalisation of elementary education. In this context, need for evaluation of civil works is much more important undoubtedly school environment has a great impact on quality teaching and learning procedure and school environment depend on some basic facilities and it includes school building, drinking water facility, girl's toilet, electricity, boundary wall, play ground, sports facilities, classrooms etc. On the basis of this, it also analyses the existence of infrastructure facilities and other performance indicators as per RTE Act, 2009. Article 21 A states that "the state shall provide free and compulsory education to all children of the age of 6 to 14 years as the state may, by law determine". To compliance with Right To Free Education Act (RTE) came to effect from 1.04.2010. The Act provides some qualitative norms for all the schools like one room for every teacher, separate & functional toilets, clean and adequate drinking water, provision for playground, boundary wall, library, kitchen. But, present infrastructure facilities in the Jalpaiguri shows a variation which act as a limit to successful implementation of RTE Act, 2009. The concluding part of the paper proposes prospective suggestions and actions that may help to achieve the objective of UEE.

### OBJECTIVE OF THE STUDY

With the above background realizing the significance of primary education in Jalpaiguri in achieving the goal of Universalization of Elementary Education (UEE), the paper was designed with the following objectives

1. To study the infrastructure facilities in Jalpaiguri district. It includes class rooms, toilet, drinking water, computer, electricity and sports facilities.
2. The paper investigates the variations in educational facilities in between state & district relating to infrastructure facilities.
3. To analyses the existence of infrastructure facilities and other performance indicators as per RTE Act, 2009 in achieving elementary education.

The paper was prepared collecting information from field survey and secondary data. Various books, journals, research papers and Government reports have been used. The paper has tried to investigate the probable causes of obstacles for effective universalization of elementary education and followed by recommendations and suggestions

### Sample Area

The district Jalpaiguri in the state of West Bengal, India is considered for the present study and it is largest district of North Bengal. The district has two subdivisions; Jalpaiguri Sadar, and Malbazar. The district is surrounded by international borders with Bhutan and Bangladesh in the north and south respectively and district borders with Darjeeling hills in the west and northwest and Alipurduar district Coochbehar district on the east. The total area of Jalpaiguri district is 3044 sq km. According to 2011 census, this district has population of 3,869,675 and population density of 622/km. According to most recent data available in 2012-13, 72% of the populations in the district are in village; so it is evidenced that large number of primary schools were situated in rural area.

The Jalpaiguri district has a sex ratio 954 females for every 1000 males which is marginally higher than the state average sex ratio (950) and literacy rate 73.25% (male 79.95, female 66.23) which is lower than state average (76.3) and thereby making rank 12<sup>th</sup> district in the state among 14 districts .

### Educational Facilities in Jalpaiguri District Vis West Bengal

#### School with Single Class Rooms

According to survey, the Jalpaiguri as a whole 15.9% of the schools had single classroom in 2013-14 while the ratio 23.5% in 2004-05. So, it was observed that from 2004-05 improvement of classroom

infrastructure have been made by only 8%.It was observed that, 90% of the school building is wholly pucca and roof covered with tin shed. The single class rooms ratio in the district for the year 2004-06 were near about 22-14% .But an impressive decadal percentage was observed in 2006-07 and 2007-08 due to higher rate of establishment of primary schools in the district. The percentage of schools that are single class rooms is also higher in Jalpaiguri district in comparison to west Bengal. In Jalpaiguri 15.9% of total schools were single class room, while in west Bengal, it was estimated at 9% in 2013-14.

To get rid of the concept of single class room in some schools, single classrooms have been converted to double class room by making fence partition in middle of the room. As a result, size of the class rooms has reduced .It was also found that, one classroom was shared by the two different grade students. It was managed by the class I and class II student' s are used to share same class due to lack of availability of the sufficient class rooms. There is no provision of separation in between this class. As a consequence, learning and teaching procedure was not effective due to overcrowded students. Free space is the big limitation and poor condition of the class rooms affect adversely on the overall academic environment. In Jalpaiguri district, although, 90% of the school buildings are owned by the Government, maintenance is the big concern for these school building. In most of the schools in urban areas, it was found that schools suffer from adequate benches and desks so that; student are required to sit in the floor or mat which was provided by the schools or sometimes student are required to bring mat from the home. If situation is such in the urban area, we could imagine the interior picture of infrastructure in the rural schools. The condition is unbearable in the winter season where the average temperature is around 8 to 14 degree Celsius during November to February. Sitting on the cold floor of the classroom really dysfunction the objective of SSA.

### School with Toilet & Drinking Water Facilities

Availability of basic amenities in the schools is the basic right of each child in the schools along with other facilities because these were integral to hygienic environment of schools. According to MHRD, about 20% of total schools in India are still lack of toilet facilities for girls, where as availability of boy's toilet 62.4%.

But, in the West Bengal, positive changes are visible in recent years. For instances availability of girl's toilet is about 90.6% in primary level, where as availability of boy's toilet 62.4%. In terms of girls toilet facility in schools, Jalpaiguri seems have been maintaining increasing trend in comparison to West Bengal. As per DISE data, remarkable improvement was noticed in 2010-11.About 90% of girls toilet facilities were available in 2010-11,compared to 34% girls toilet in schools in 2009-10 in the district. And the district is still maintain is an impressive picture in terms of girls toilet facility. More schools now have girls toilet facility, about 90% of schools had girls toilet facility in schools in 2013-14, compare to 38% in 2008-09;and 25% in 2004-05.

Figure-I

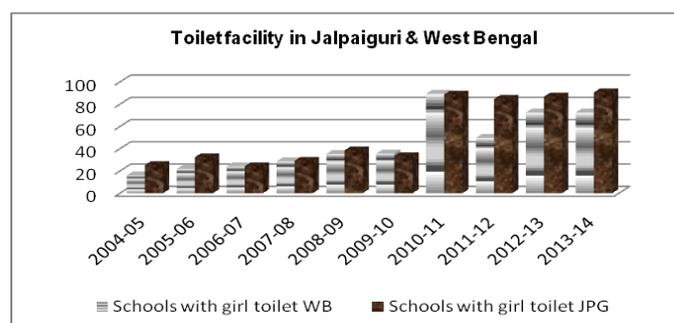
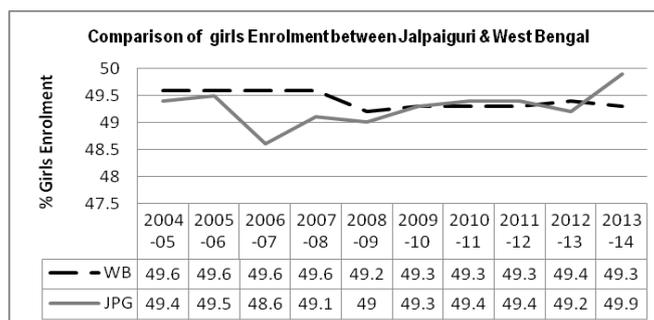


Figure-II



The ratio of girls enrolment to total enrolment from 2004 to 2014 at the primary level had been remained uniformly near about 49%, despite of providing several facilities to the girls. Proportion of girls enrolment had not shown any significant improvement in West Bengal and as well as in Jalpaiguri, also. Participation in universalisation of elementary education of girls still not attained at a desired level. Gender disparities is one of the major issues in elementary education in Jalpaiguri district due to geographic & cultural factors. From the above table it was reflected that, girls enrolment has come down to 49.2% in 2012-13, as compared to 2011-12, 49.4%. The enrolment of girls has increased by only 0.7%; for last year 49.2% to 49.9%. Though the sanitation facilities were provide in most of the schools, but due to non maintenance & non cleaning, toilet facility became non functional. As per norms, toilet facility were available, but a question remains always about the functionality.

Provision of drinking water is one of the majority necessities in any school. Although 90% to 95% of the schools are covered with drinking water facility. In 2004-05, 70% of the primary schools in Jalpaiguri district had drinking water facility. But in reality, some schools provide drinking water from well, which is really unhygienic and condition is getting worse in rainy season due to high level bacteria prevails in the well and it was observed that some of the schools near to Jalpaiguri sadar, does not have the facility of drinking water. As a result, student often go to home or near tube well for drinking water and come back to school at the time of mid day meal or sometimes they did not come back.

“Wash in School in India: Commitments and Action” is an implementation of UNICEF global programme which was introduced in 2012. In meeting with global programme, every child has a right to get water and sanitation. Wash in school in India: Commitments and Action is an adoption of the UNICEF global document “Raising Even more clean hands: Advancing Health, learning and equity through Wash in school” launched in 2012-Sue Coates, UNICEF. Since 2008-09, of the 80% of the schools reported to have drinking water facilities in both West Bengal and Jalpaiguri district. In the district area, 98% of total number of schools provided drinking water facility in the schools. The figures are almost equal corresponding by state average figure during 2010 to 2014.

### Schools with Other Facilities

#### Electricity & Computer

According to survey 2013-14, only 20% of the primary schools had the facility of electricity whereas in 2010-11, it was 13.9%. In Jalpaiguri an around 20% of the total primary schools are provided with the facility of electricity in comparison to state wide figure around 29% in 2013-14. In comparison with state wide figure, Jalpaiguri district is still deprived to provide electricity in most of the schools. In this regard, as there is no provision of fund for paying electric bill, most of the schools suffer unbearable situation in the months of April to June. Some schools had the facility of electricity connection by managing funds from teachers and managing committee, VEC (Village Education Committee) and NGO. Electrification to the schools is necessary to energize the student and as well as teacher to run an enthusiastic learning programme.

Strengthening the school education in the modern era of globalisation cannot be completed without digital education. Introduction of computer and computer aided learning helps to develop their logic faster as they easily picks up digitally moving character compare to blackboard fixed character and it will increase school performance in all respect significantly. In modern schools, ICT (information, communication and technology) plays a significant role in effective teaching and learning procedure. From 2010 to 2014, electricity & computer facility in district has always ranked lower than State average. During the period of 2010-11, a small percentage of schools in West Bengal (3.6%) were computers.

### Sports Facilities

This part shows that 53.7% schools in the Jalpaiguri district had only the playground and very few schools had the facilities of sports material. But, most of the private schools have the facility of playground along with the sports material and they had been maintaining the other facilities. Most of the private schools had the manpower of maintain the play ground and sports material. Universalisation of elementary education is worthy objective. A credible result only visible when teaching and sports are emerges and it would reduce the social barrier among the children by mixing with each other at the time of playing. During the visit of some schools, it was found that first aid medical kits are also not available in most of the schools. As per DISE data (2013-14), there were sixteen (16) performance indicators to evaluate the civil works under SSA, but some performance indicators like first aid kit, sports material, water purifier, benches & desks should be included to evaluate the success of SSA in a better way. In the elementary education context, sixteen (16) indicators have been identified as performance indicators. The performance indicators are single class room schools, single teacher school, school schools with girls & boys toilet, schools with boundary wall, schools with drinking water, schools with playground, schools with ramp, schools with electricity, schools with computer etc. It would also be suggested that, at least a medical centre should be situated within 5km distance from the school.

### Right to Education Act, 2009: Issues & Challenges

Right of children to free & compulsory education act, 2009 (RTE) was passed in the Parliament on August 27, 2009 and came into effect from April, 2010. The RTE Act is mainly influenced by several factors. As per section 8(f) of RTE Act, 2009 the appropriate authority shall ensure and monitor admission, attendance and completion of elementary education of each child all the schools and in respect of infrastructure, schools should have playground, drinking water facility, boundary wall, library, kitchen and in respect of quality norms, each school should have the provision of PTR (pupil teacher ratio 30). This section critically reviews the RTE Act 2009

### Comparison of DISE between 2010-11 and 2014-15: West Bengal Vis-à-vis West Bengal selected Indicators

Performance Indicators		2010-11	2014-15	Difference
% single class Room	WEST			
	BENGAL	14.4	7.6	-6.8***
	JALPAIGURI	20.5	7.2	-13.3***
% girls Toilet	WEST			
	BENGAL	89.4	85.7	-3.7***
	JALPAIGURI	88.6	71.7	-16.9***
% drinking water	WEST			
	BENGAL	95.4	98	2.6***
	JALPAIGURI	93.9	96.9	3****

**Arts & Education**

	WEST			
% single teacher school	BENGAL	3.2	3.3	0.1***
	JALPAIGURI	3.2	4.8	1.6***
	WEST			
% Electricity	BENGAL	21.3	20.8	-0.5***
	JALPAIGURI	13.9	24.6	10.7***
	WEST			
% computer	BENGAL	3.6	4.8	1.2***
	JALPAIGURI	13.9	4.2	-9.7***
	WEST			
% of female teacher (Teacher>2)	BENGAL	27.8	45.7	17.9***
	JALPAIGURI	19	52.7	33.7***
	WEST			
Pupil Teacher Tatio	BENGAL	34	22	-12***
	JALPAIGURI	29	21	-8***
	WEST			
% of school with providing MDM	BENGAL	92.8	98.4	5.6***
	JALPAIGURI	97.2	99.7	2.5***
	WEST			
% of schools with kitchen shed	BENGAL	56.9	54.2	-2.7***
	JALPAIGURI	83.4	85.4	2***
	WEST			
% of girls enrolment	BENGAL	49.2	49	-0.2***
	JALPAIGURI	49.4	48.9	-0.5***

Significance: \*\*\*1%

The main focus of RTE Act, 2009 is to gear up universalization of elementary education. The above analysis revealed that, district needs more expenditure in terms of infrastructure, as it has got single class room ratio 20.5 %( against the West Bengal state average 14.4%). More than 90% of schools in Jalpaiguri & the state had the facility of drinking water, availability of girls toilet facility in district and the state are 71.7% & 85.7% in 2014-15 respectively compare to 88.6% and 89.4% respectively in 2010-11. During 2014-15, percentage of computer facility available in Jalpaiguri (4.8%) was higher than state average (4.2%). The percentage of female teacher increased significantly from 19% in 2010-11 to 52.7% in 2014-15. More recruitment of female in schools is the positive attitude towards girls enrolment. Figure-II reveals that girls enrolment decreased to 48.9% in 2014-15 from 49.4% in 2010-11, along with state diminishing rate 0.2% from 2010-11 to 2014-15. Girls child in this district still experiences a different treatment like 'nakusa' (unwanted in Marathi in rural Maharashtra) due to social-psychological factors. availability of electricity in the schools in the district 24.16%, which is significantly higher than 2010-11 (13.9%). During 2014-15, almost all the schools in the state and as well as district implemented the MDM programme and revealed that 85.4% of total schools in district had the facility of kitchen shed which is significantly higher than state average (54.2%).

Apart from adequate infrastructure, another key issue is the quality of learning which is based on teachers of requisite quality. There is no provision of office staff in the primary schools to monitor admission, and attendance of each child in the school and as a result, teachers usually do all the school related work like teaching and other administrative responsibilities. So, effective teaching-learning may be hindered due to over engagement of non teaching duties. As per section, 8(g), RTE Act, 2009 demands good quality education. After the five years of implementation of RTE Act, 35.9% children of Std-I, could not identify a letter and 51% student of std-V, could not read the std-II text, as per

ASER report 2013, in West Bengal. In Jalpaiguri district, near about 40% of student of std I-III could not read letters, words. In mathematical aptitude, the picture was very worsen, only 28.6% of the total children could do subtraction or more. The quality of education is really at stake due to existence of section 16 of RTE Act, 2009. As per this section, no student shall be held back or expelled from the school till the completion of elementary education. So, universalisation of elementary education is universalized at the cost of quality, as there is no retention policy. From the above table, still some of the schools in Jalpaiguri district do not have the facility of drinking water (3.2%), boundary wall (78%), girls toilet (9.4%). The monitoring method has not developed to evaluate the implementation of RTE Act, 2009. Due to absence of have such basic facilities RTE Act, 2009 is really challenged.

### CONCLUDING OBSERVATIONS

All children are different in nature to their mental & physical attributes. Various education policy, after independence were implemented to equalize their mental abilities by providing proper education and this has resulted the implementation of SSA along with the provision of some basic facilities. There is need for certain urgent steps to increase the enrolment in the elementary education. Like, at first, there is exist a gap between demand and supply of infrastructure facilities in the schools. More supply of infrastructure facilities in schools will create a suitable academic environment. Secondly, expenditure on primary education needs very careful planning and monitoring to develop a better academic environment. Expenditure on primary education should be increased, at least 6% of GDP as per Kothari commission. Thirdly, future manpower of the country will depend on quality education. And; the quality education is primarily depending on both teaching and infrastructure facilities. Providing same basic facilities & quality teaching in all schools will reduce regional & social disparities among children. If expenditure on civil works remain fall short of the requirement, private institutional could be invited to fill the gaps with some regulatory framework. Fourthly, largest launch programme in the school MDM (Mid day meal) is now facing challenges in respect of nutrition and hygiene. Government & other administrated agencies should adopt a proper method to implement the truly nutritional support by inclusion of NGOs and other agencies. Expenditure on education should be termed as investment not as expenditure as it has significant return in future for overall development and quality of human life.

### REFERENCES

1. Annual Report (2014) on the Right of children to Free & Compulsory Education Act, 2009 published by MHRD, Department of School Education & Literacy.
2. District Statistical Handbook (2012), Bureau of Applied Economic & Statistics <Department of Statistics & Programme Implementation. Govt. of West Bengal.
3. Pratham.2013,Annual Status Education Report.<http://www.pratham.org>
4. Shukla, Siddheshwar (2014) “ Midday meal-Nutrition on paper, poor food on the plate ”,Economic & Political weekly,15<sup>th</sup> Febuary,No-7
5. Singh, D.P & Ritu (2013) “Facilities in Government Rural schools in Punjab-Required a shift from quantity to quality” Education Frontier in India VOL-XI
6. The Times of India 3.06.2016,( <http://timesofindia.indiatimes.com/city/mumbai/>)
7. Government of India, 2001.Census.Ministry of Home Affairs. <http://www.censusindia.net/>
8. Government of India, 2011.Census.Ministry of Home Affairs. <http://www.censusindia.net/>
9. <http://schoolreportcards.in/SRC-New/BasicSearch/BasicSearch.aspx>
10. <http://www.census2011.co.in/>
11. <http://www.mapsofindia.com/maps/westbengal/westbengal-district.htm>



## Gender Disparity in Universalization of Elementary Education in West Bengal- Expanding Access with Equity

Arindam Metia, Assistant Professor in Commerce, North Bengal St. Xavier's College, Rajganj, Jalpaiguri Dist., West Bengal & Dr. Sidhartha Sankar Laha, Asst. Professor in Economics, Toofanganj College, Toofanganj New Town, Cooch Behar Dist. W. Bengal.

### Education is a historical perspective

Education is the best resource of the human being. Plato thought that "Good education consists in giving to the body and to the soul all beauty and all the performance of which they are capable". An educated human being is an asset to a country and country's development.

British set the foundation of modern education in India. Macaulay's policy of 1835, Sir Charles Wood's dispatch of 1854, and the Indian Education Commission were the major historical landmarks in respect of education system in India. But the education system in India, started by the British, remained available only for the upper caste, high and rich class people. After independence, the Govt. attempted to extend the primary education to the masses, particularly in the rural area.

The national policy of education (NPE) and the Programme of Action (POA) (1986 revised in 1992) marked a significant departure in India's educational history. The chapter titled "Education for Women's Equality" states: Education will be used as an agent of basic change in the status of women. In order to neutralize the accumulated distortion of the past, there will be well-conceived edge in favour of women. The national education system will play a positive, interventionist role in the empowerment of women. It will foster the development of new values through redesigned curricula, textbooks, the training and orientation of teachers, decision-makers and administrators, and the active involvement of educational institutions. This will be an act of faith and social engineering..... The removal of women's illiteracy and obstacles inhibiting their access to, and retention in, elementary education will receive overriding priority through provision of special support service, setting of time targets, and effective monitoring..... (GOI 1986, 1992). For developing and growing economy, we urgently need a quality education for achievement of Universalization of Elementary education. To make elementary edu-

cation a Fundamental Right of every child (irrespective of sex) in the 6-14 age group, the Government of India has taken a decision to merge the universal Elementary education programmes in the country in mode of Sarva Shiksha Abhiyan (SSA).

In the present paper, we have tried to provide some basic information and highlight certain issues relating to gender disparity in elementary education.

### Primary Education: Current Scenario

Since independence, the Central and State Govt. have put their great effort for expanding the provision of primary and non-formal education to set the goal of universalisation of elementary education. Thus universalization of elementary education became a nation wide project. However, the image of elementary education in India began to reform due to policy adopted by the Govt's New national Policy of Education (1980) and the programme of Action 1992, which aimed at improving access, reducing drop out and gender disparity in education. Some of the important initiatives have already been taken like, Operation Blackboard (1986), Non-formal education scheme (1986), the Shiksha Karmi Project (1987), Mahila Samakya (1989), Lok Jumbush (1986), the district primary education project (1994), Mid day meal scheme (1995), Shishu Shiksha Karmasuchi (1999), the Alternative innovation and Education Guarantee Scheme (EGS/ AIE), Kasturba Gandhi Balika Vidyalaya (KGBV), National programme for Education of Girls at Elementary Education (NPEGEL) and Sarva Shiksha

Abhiya and Anganwaris offers nutrition support at pre-school children aged between 0-6 years and early childhood care. From the first five year plan Govt. of India showed a deep interest about the total literacy campaigns and Government has taken some new plans in every five year plans to reform the education system in India. Eighth plan (1992-97) aimed at universalization of elementary education and that programme was divided into three broad categories i) Universal access ii) Universal retention iii) Universal achievement. The govt. of India has taken many administrative measures to ensure accelerate growth of equality and justice including a gender free education... These initiatives obviously have had positive impact on children's access to education. According to 2001 Census the gender gap in literacy in West Bengal is (1986), the parliamentary Committee for women, also described low Gender Enrolment ratio and high drop out rates to gender inequality. The Constitution of India (86<sup>th</sup> amendment) act 2002, seeks to make free and compulsory education as fundamental right to all children in the age group 6-14. The all the above mentioned projects aimed at completion of eight year schooling by all children between 6-14, by 2010.

Official statistics reveal almost total universalization of school participation at the primary level. But, these figures do not reflect the actual school participation of children. Despite the inflated nature of data, the gender gap in respect enrolment is significant. This can be shown in the following table.

Table-1 The Govt. initiatives towards elementary education has led to some positive developments.

Activity	Achievement
Access	98% of the rural population has a school within 1km. 1,86,985 new schools opened till 2007.
Gross enrolment Ratio	GER raised in 6-14 age group to 110.86 in 2006-07 from 97.82 in 2004-05 at the primary level and 64.72 in 2006-07 from 59.17 in 2005-06 at the upper primary level.
Drop out at the Primary level	Reduced by 10.54% to 28.49% in 2004-05 from 39.03% (2001-02). Drop out rates for girl declined by 18.08%.

Source: Annual Report 2007-08, Deptt. Of HRD

**Table- II SEX WISE ENROLLMENT 1999-2000 to 2003-04 (in million)**

YEAR	PRIMARY (I-V)		UPPER PRIMARY (V-VIII)	
	BOYS	GIRLS	BOYS	GIRLS
1999-2000	64.1	49.5	25.1	17
2000-2001	64	49.8	25.3	17.5
2001-2002	63.6	50.3	26.1	18.7
2002-2003	65.1	57.3	26.3	20.6
2003-2004	68.4	59.9	27.3	21.4
2004-2005	70.12	61.5	28.71	22.96

Source-SES, MHRD

The presented table-II shows that there has been progress in improving education for both boys and girls over the years. Despite the improvement in literacy, there continues to be large gap between literacy levels of boys and girls. With all its well planned projects, India has not achieved to the full extent to provide universalisation of education. Gender disparity persists from 1999-00 to 2004-05. With some positive developments, some of the drawbacks are still there in respect of states with highest number of out of school children.

The top seven states in with number of out school children in the age group 6-14 exceeds near about 1 million. The highest percentage of out of school children exists in Bihar and Jharkhand.

**Female Literacy In West Bengal:**

With all its promises, West Bengal has not been able to provide universalization of education. Early marriage, absence of education infrastructure have led to only

most of the third world countries, women suffer from description and injustice. Even after 60 years of independence, status of men and women differs to a great extent. Unmarried, widowed, separated and divorced women throughout the area suffer from dependency and are considered burden to the family. Female literacy rate correlates with lower of the above factors. Educated women can be self sufficient and empower and it also increases women's status in the society. The low education has had adverse effect on women's quality of life and improvement.

The above table-IV showed the progress of literacy from 1971 to 2001. The gap between male and female literacy is a significant indicator of social discrimination.

We have seen that gender disparities exists in India from 1971-2001. In West Bengal, as in the other states of India, "Elementary Education" means very special things to the children coming from different seg-

an impact is the rate of literacy of men and women. Literacy rate is dependent of higher growth rate in enrolment and lower drop out rate. West Bengal has achieved remarkable progress in terms of some issues like land reforms, decentralization of power through local Government (Panchayats) and political stability. Among the positive factors, we found that some most disturbing literacy rate in West Bengal. The following table - V shows the difference in literacy among the district in West Bengal

The difference in literacy rate among the districts are shown in table-V. Kolkata has the highest female literacy rate with over 77%, the district with second highest female literacy rate is North-24 Paraganas, where nearly 73% of women are literate. On the other hand there are several districts that have literacy rate of less than 50% including Purulia, bankura, Maidah, uttardinakpur. West Bengal, despite its deficiencies, has belonged to the better performing group of states over the past four decades. The improvement in literacy has been quite rapid since the 1991 Census. Gross enrollment ratios are quietly increasing at a satisfactory rate, 66.17% in 2005-06, 71.47 in 2006-07 and 72.01 in 2007-08.

The present paper will focus on how and why education is key to gender equality and also will take a look at education opportunities for women and the reasons for inherent gender bias in the society.

Education is widely recognized as the gateway to economic security and opportunity particularly for girls and women. But, the West Bengal literacy rate relate to a unsatisfactory image. The important factor limiting female education is poverty. Economics plays a vital role when it comes to cope with direct cost such as tuition fees, transportation and other related costs. When the family income with many children, these costs exceeds the income of the family, girls are the first to be denied schooling.

**Analysis of Literacy Gap In West Bengal**

**Growth in Gross Enrolment ratio**  
Gross enrolment ratio calculated as ratio of the gross enrolment of children as a proportion of the total children in the relevant age group, is an indicator to access the extent of access of children.

During 2003-04 through 2006-07 enrolment in the elementary education has not shown satisfactory performance. In 2004-05 annual increase in enrolment in primary for boys was 2.13% and for upper primary it was 2.61%. But in the case of girls,

**Table-III State With Highest Number of Out of School Children**

State	Number of Out of School Children	% of out of School children
Bihar	3178624	17
Uttar Pradesh	2995208	8.15
West Bengal	1213205	6.67
Madhya Pradesh	1085096	8.63
Rajasthan	795084	8.67
Jharkhand	620945	10.88

Source-IMRB-SRI survey July-Dec 2005

**Table-IV Sex wise literacy rate from 1971-2001**

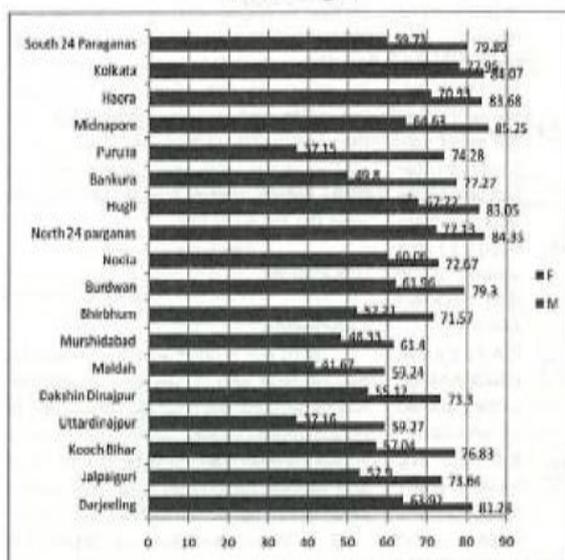
Year	% Literate	Male (in Million)	Female	M/F literacy gap
1971	34.45	45.96	21.98	23.98
1981	43.57	56.37	29.55	26.82
1991	52.21	64.13	39.29	24.84
2001	65.38	75.85	54.16	21.69

Source-SES, MHRD

59.61% (Census 2000) female literacy. The Govt. have taken a strong commitment towards the education for all, but still lower female literacy rate persist in West Bengal. Discrimination is a natural phenomenon. In

ments of society. The positive impact of the expansion of elementary education among children can arguably be felt in many sphere of the social and economic life of people. One important dependable indicator of such

**Table-V Differences in Literacy among the Districts in West Bengal.**



Source: <http://www.censusindia.net/results/literacy.html>  
Note: Literacy rates updated 18.05.2002

**Table-VI Gross Enrolment**

YEAR	I-V				VI-VII			
	Boys	Girls	Linear growth rate		Boys	Girls	Linear growth rate	
			Boys	Girls			Boys	Girls
2003-04	107.45	107.21			65.9	62.57		
2004-05	112.12	111.27	2.13	1.85	69.43	63.31	2.61	0.59
2005-06	108.38	98.28	-2.63	-6.2	70.97	62.22	1.09	-0.87
2006-07	102.1	103.4	-2.05	2.54	70	71.9	-0.89	7.21

primary as well as upper primary stages less proportionate increase in enrolment which was only 1.85% and 0.59% respectively. In 2006-07, whereas the annual growth rate for boys was decreased by 2.05% but girls' enrolment was increased by 2.54%. Similarly for upper primary boys' decrease in enrolment was at the rate of 0.69%, for girls it increased by 77.16. The relevant details are in table-3

The data for last four years viz 2003-04, 2004-05, 2005-06 & 2006-07 suggests that growth rate in enrolment for girls were higher than that of boys except in the year 2005-06 at primary level, but growth rate in enrolment for boys was higher than that of girls at upper primary level.

During 2003-04 through 2005-06, enrolment in elementary education in India increased quite significantly more with respect to the upper primary stage but West Bengal has not experienced with this success. Where constant annual increase in enrolment in primary and also upper primary in all India, West Bengal fails to maintain at par performance with the Indian standard.

**Girls Enrolment**

One of the very important considerations to achieve UEE is to ensure gender parity. To measure this, girls enrolment rate

was shown in Table-3. We can conclude that except in the year 2006-07, both in primary and upper primary gender gap (difference in boys and girls enrolment) continued from 2004-05 to 2005-06. Highest gender gap was identified in the year 2005-06.

**Drop out**

Drop out rate is defined as the proportion of children that cease to remain in the schooling system.

Table -VII, suggests that drop out rate were increased by 10.74% for boys and 14.8% for girls in the year 2004-05. After that, drop out rate rates diminished, but rate of diminishing for

boys were higher than the girls. Although, the diminishing trend in drop out is heartening. Continuous planned efforts, policies and long term strategies would be required to ensure further reduction.

If we compare the drop out rate of students at elementary grades in the West Bengal, the difference is noteworthy. At primary level boys enrolment growth directly co-related with the drop out rate. In the year 2006-07, drop out rate remarkable decrease by 9.75% through the growth rate decreased by 2%.

Despite the reported progress, there is still persistent gap between women and men's access to education. However, gender disparity in respect of growth rate and drop out are identified highly in 2004-05. In 2006-07, West Bengal has achieved relatively higher success rate in increasing growth rate and decreasing drop out rate.

The data for the last four years viz. 2003 to 2007 table - IX suggests that gross enrolment among SC students achieved near total univer-

salization of school enrolment at the primary level. 2003-04 statistics showed good performance in enrolment but after that rate of enrolment decreased. Though the rate of enrolment in primary reeducation has increased, West Bengal witnessed an alarming statistics of out of school children who have not chance to enroll.

In 2004-05, drop out rate increased by 16.14% for SC boys and 22.92% for girls. In 2005-06 and 2006-07, rate of drop out has decreased, but rate of diminishing for boys higher than girls.

It has been widely acknowledge that the socioeconomic conditions in West Bengal particularly in rural area have constrained the process of primary education and social inequalities of caste, class and gender have been identified as the major causes of educational deprivation among SC children in West Bengal. The above table shows larger proportion of SC children from economically poor and socially disadvantage group and girls are failing to achieve the universal goal of elementary education. The goal of universal Elementary Education remains a challenge to achieve even after six decades of independence.

In this context it may be worthwhile taking note of a few developments:

- Despite improvements a little portion of reduction in enrolment rate of SC students at primary level in 2004-05, drop out continued to remain. Higher drop out was noticeable in case of girls students.
- In 2005-06, some progress has achieved and drop our rate has reduced.

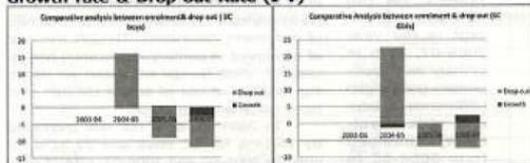
**Expanding Access with Equity in Elementary Education**

To make a good progress in education in West Bengal, require strong and productive joint venture. The Govt., the corporate sector, non-Govt, International agencies and local bodies need to make a strong committed partnership to ensure universalization of elementary education. It is now time to revisit two dimensions of access and equity and also identify elements in which are likely to contribute significantly to universalizing quality education. Efforts should be made to have quality schools within 1-2 kms. these schools should be well equipped with electricity, girls toilets,

**Table-VII Details of drop out rates Drop Out**

YEAR	I-V				I-VIII			
	Boys	Girls	Linear growth rate		Boys	Girls	Linear growth rate	
			Boys	Girls			Boys	Girls
2003-04	34.12	32.73			62.72	64.92		
2004-05	42.33	44.1	19.74	14.8	63.7	63.55	9.77	-1.09
2005-06	37.58	42.94	-5.84	-1.33	61.16	63.88	-2.03	0.26
2006-07	30.9	29.4	-9.75	-18.71	63	59.5	1.48	-3.55

**Table-VIII Comparative analysis between Annual Enrolment Growth rate & Drop out Rate (I-V)**



**Table-IX Education of SC Children**

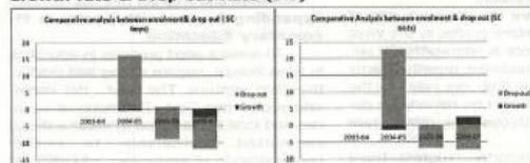
YEAR	I-V			
	Boys	Girls	Boys	Girls
2003-04	116.68	113.19		
2004-06	116.28	110.32	-0.17	-1.28
2005-06	117.41	110.24	0.48	-0.23
2006-07	112.1	116.1	-2.31	2.59

**TABLE - X DROP OUT**

YEAR	I-V			
	Boys	Girls	Boys	Girls
2003-04	37.38	36.58		
2004-05	51.77	58.33	16.14	22.92
2005-06	43.34	50.95	-8.87	-8.75
2006-07	35.8	44.04	-9.52	-7.27

In 2004-05, drop out rate increased by 16.14% for SC boys and 22.92% for girls. In 2005-06 and 2006-07, rate of drop out has decreased, but rate of diminishing for boys higher than girls.

**Table-XI Comparative analysis between Annual Enrolment Growth rate & Drop out Rate (I-V)**



drinking water facility and sufficient educational material. Obviously, quality of learning can not be achieved without absence of teacher and basic facilities in schools.

In West Bengal "Gender equality" is a very sensitive issue. People in West Bengal are traditional minded. They adhere to their moral values and proud of their culture and heritage. So, the issue "Gender disparity" is challenging issue. There is urgent need to focus on the educational needs of girls children. Though, the various projects have been taken by the different administrative bodies, they offer number of initiative for

education and the class room reaching and interaction should be in local language.

- v) Community and local people should take initiatives to create positive climate for girls' education.
- vi) Promoting a culture of life in the schools so that girls students learn to handle stress situations effectively and adopt healthy life styles.
- vii) Adequate number of female teacher should be appointed.
- viii) Mass media should be utilized for reflecting positive image of girls.
- ix) Enhancing teacher motivation.

UEE, but still there is a gap between policy making and policy implementation. So, We concluding our paper with some possible suggestion to make primary education among the girls more accessible

- i) Adequate educational facilities should be provided.
- ii) Opening more primary schools in rural areas and qualified and responsible teachers should be appointed and local bodies responsible for enrolment and attendance.
- iii) Special teaching support and counseling should be provided to students and also guardians to continue schooling.
- iv) Text book should be in mother tongue for children at beginning of

**Methodology**

The methodology can provide details on how to gather data for the study. Usually this will involve interviewing, data analysis. The methodology mainly consists of using secondary data. Secondary data collected through books, research journals, and the published report by the Govt. In this section charts were used to interpret the data. To interpret the data, the authors used the following tool

Present value — previous value  
Linear growth rate =  $\frac{\text{Present value} - \text{previous value}}{\text{previous value (no. of years)}}$  x100

**Conclusion**

With our schools and the thousands that we have with us, we have an opportunity to re-found our education if we dare to dream great dreams. Today our primary education objectives must be to form men and women for others; men and women who will live not for themselves, but for society. What we have discussed above, it is not enough to think only in quantitative terms. One needs to pay attention to the qualitative aspect of elementary education. If we compromise quality and allow traditional expansion of schools, the real gains will not be achieved. The mission of the primary education should be assist in the fullest possible development of all the given talents of each individual child as a member of the human community. The focus of the primary education should be helping students to develop a healthy self image through positive school climate that creates win-win situation for all and also provide common minimum programme of participation in various co-curriculum activities resulting in students discovering their talents and enhancing them putting them at service of the community.

**References**

1. Annual Report 2004-05"- Department of School education & Literacy and Department of HRD, Govt. of India.
2. Annual Report 2006-07"- Department of School education & Literacy and Department of HRD, Govt. of India.
3. Annual Report 2007-08"- Department of School education & Literacy and Department of HRD, Govt. of India.
4. Annual report 2008-09"- Department of School education & Literacy and Department of HRD, Govt. of India.
5. Betelle, T (2002) "Elementary Education in India"-www.ici social initiative.org
6. Majumdar, T (2006) "Cost & Financing of Elementary Education in West Bengal" Sage Publication, PP No-251-284.
7. Mehrotra, S (2005) "The Economics of Elementary Education in India"-Sage Publication PP-251-280.
8. Pandey & Prasad, A ( 2006) "Gender disparity in education-needs community participation" MPRA Paper no-622.(http://mpra.ub.uni-muenchen.de/622).
9. Velloff, A, Victoria (1998) "Women's education in India"-Women of the World, International programs centre, US Department of Commerce, Economic & Statistics Administration, Bureau of Census
10. Victoria A. Velloff (1998) International Programs Center "Women's education in India"-women of the world.







