

Mid-Day Meal Scheme: As Perceived By the School Teachers in Bihar

Dr. Madhu Singh

Assistant Professor, St. Xavier's College of Education, Digha Ghat, Patna-11

Abstract: Mid-Day Meal Scheme (MDMS) programme is being implemented in the state of Bihar since January 2005. MDM continues to be a big distraction for teachers in Elementary schools. Although in Bihar there has been increase in access rates and a significant increase in classroom infrastructure, but children are not achieving class-appropriate learning levels. The purpose of this study is to study the level of attitude of elementary school teachers towards Mid-Day Meal Scheme and to examine significance of difference in the attitude of teachers on the basis of gender, educational level and annual income. The population of the study was Elementary school teachers of Government schools in Bihar. The sample of the study consisted of 327 Elementary School teachers of government schools in Bihar. The results show that attitude of teachers differed significantly on the basis of sex. Teachers with intermediate as their educational level have more favourable attitude than the teachers who were post-graduate. No significant difference was found on the basis of their annual income.

Keywords: Mid-Day Meal Scheme, examine significance.

1. INTRODUCTION

According to the UNESCO Global Education Monitoring Report (2015), 'India has made remarkable strides towards ensuring education for all, while access is now close to universal; the quality of education remains a major challenge.' Despite improvements in enrolment, keeping children in school through graduations still an issue and dropout rates continue to be high. In many ways schools are not equipped to handle the full population. There is a teacher shortage of 689,000 teachers in primary schools, only 53% of schools have functional girls' toilets and 74% have access to drinking water. Most crucially the Annual status of Education Report (ASER) said that there were wide disparities in students' achievement of basic skills across the states, a finding validated in the official National Achievement survey of grade 3 students. About 20% of Indian children between the age of 6 and 14 are not enrolled in school. Even among enrolled children, attendance rates are low. 26% of pupils enrolled in primary school drop out before grade 5. The situation is worse in certain sectors of the population: the poor, those living in rural areas, girls, and those living in some states, such as Bihar and Rajasthan.

Bihar with 63.82 % literacy rate, ranks lowest amongst all 29 states and 7 UTs of the country. The economy of the state is characterized by high incidence of poverty, , unemployment and low per capita income. It accounts for the land of 23.8 million kids of 6-14 years age group which possess serious challenges on stakeholders to ensure good quality education and nutrition for those who are falling under school going age. Although in Bihar there has been increase in access rates and a significant increase in classroom infrastructure, many low- income parents are prepared to pay to send their children to private schools, especially boys, as they see non-government, low fee schools providing better quality teaching, learning and facilities. Studies have shown that 20 per cent of learners at standard I and 2 clearly failing. Only half the class achieve a 'moderate' level of learning. Learners at Standards 3, 5 and 8 score significantly lower than the national average in reading, comprehension and mathematics. Learners are very responsive to new activities, technology and ways of learning when these are experienced (British Council, 2016)

Mid Day Meal Scheme (MDMS) is one of the country's national flagships feeding scheme initiated to improve the nutritional and educational status of the vulnerable children. The Mid-Day Meal (MDM) programme is being implemented in the state of Bihar since January 2005. MDM continues to be a big distraction for teachers in Elementary schools. Teachers are blamed for anything that goes wrong with the scheme. Due to rampant corruption in the implementation of MDMS and sporadic incidents of food poisoning, teachers are getting a bad name. If India is to build a globally competitive workforce, a large share of its children must finish primary education and secondary education.

2. REVIEW OF RELATED LITERATURE

In most of the studies reviewed by the researchers, it was found that implementation of Mid-Day meal has increased school attendance, enhanced enrolment and retention in Elementary Schools and has reduced the drop-out rates. Dreze and Goyal (2003) have found that MDM is more beneficial for SC, ST and low income group students. Studies by Uma (2013), Blue (2005), Swain and Sahu (2014) revealed problems for the proper implementation of the MDM Scheme because of lack of infrastructural facilities in schools. Studies by Nambiar and Desai (2013), Uma (2013), Kumar (2008), Dreze and Goyal(2003), Patibandla (2013), SCERT, Chattisgarh (2014), Blue (2005), Drez and Goyal (2003), have found that the Scheme has increased teacher's responsibilities. Studies by Bisht (2007) and Baru et al (2008) have found that instead of MDM, incentives should be given.

Singh (2013), Sood and Kumar (2004), Chauhan (2011), Giri (2013) found that teachers had positive attitude towards MDM. Kaor and Verma (2015) found no significant difference in the attitude of teachers on basis on gender and habitation. Sarkar & Bhattacharya (2015) found that MDMs do not hinder other educational activities. Studies by Jain and Shah (2005), Swain and Sahu (2014), Nambiar and Desai (2013), Swain and Sahu (2014), 5th Joint Review Mission Team on MDM in Bihar (2013) have reported that quality of food is not maintained.

3. RATIONALE OF THE STUDY

Mid Day Meal Scheme is one of the country's national flagships feeding scheme initiated to improve the nutritional and educational status of the vulnerable children. . However Mid-day meal fails to address its multidimensional benefits due to various reasons in Bihar. Teachers' perception for MDM as additional burden is one of the many drawbacks of the scheme. However most of studies found that it has increased the enrolment and attendance but the teaching quality has suffered up to an extent and the parents also complain for the same. For quality education it is required that the research findings in this area are highlighted so that they can draw attention. This study will be very helpful to the politicians, policy makers, researchers, teachers and all others who are concerned with the mission to reach the goal of UEE , minimise dropout rates and to ensure quality education is accessible to all.

RESEARCH OBJECTIVES

1. To find out the level of attitude of elementary school teachers towards MDMS in Bihar.
2. To examine significance of difference in the attitude of elementary school teachers towards MDMS in Bihar on the basis of Sex, Educational Level and Annual Income.

HYPOTHESES:

To study the significance of difference in the attitude of elementary school teachers towards MDMS in Bihar on the basis of Sex, Educational Level and Annual Income following null hypotheses were formulated:

- Ho 1:** There is no significant difference in the attitude of elementary school teachers towards MDMS on the basis of sex.
- Ho 2:** There is no significant difference in the attitude of elementary school teachers towards MDMS on the basis of their educational level.
- Ho 3:** There is no significant difference in the attitude of elementary school teachers towards MDMS on the basis of their annual income.

4. METHODOLOGY

- a. **Method:** Survey technique under descriptive method of research was used.
- b. **Population:** Elementary school teachers of government schools in Bihar.
- c. **Sample and Sampling Procedure:** Out of 38 districts of Bihar four districts namely Patna, Gaya, Madhubani and Begusarai were selected. Two districts were selected from North Bihar and two were selected from South Bihar. The sample of the study consisted of 327 Elementary School teachers of government schools of 4 districts. Purposive sampling technique was used to select the sample
- d. **Tool:** A self constructed attitude scale was used. The main purpose of this attitude scale was to explore the attitude of Elementary school teachers towards Mid-Day Meal Scheme and to measure their feelings of like or dislike about the Scheme. After review of many studies six dimensions were identified viz. attraction for students, health and hygiene, development of socialisation, quality of teaching and employment generation. This scale was developed in Hindi language. The scale were constructed by making use of Likert's method of summation to get a five point judgement on each item. A total of 40 items was finally selected for the Attitude scale. There were 18 positive statements and 22 negative statements
- e. **Statistical Treatment:** After collection of data, all the responses was entered on a Microsoft Excel sheet. For analyzing data statistical techniques used were percentage, mean, standard deviation, t test and F-test. F - ratio was calculated using SPSS. The hypotheses were tested at 0.01 and 0.05 level.

5. RESEARCH AND DISCUSSION

(i) Level of attitude of elementary school teachers towards MDMS. To study the level of attitude percentage analysis was done.

Table 1: Level of Attitude of elementary school teachers towards MDMS

Level	Elementary School Teachers	
	Number	Percentage
Low	06	1.83
Moderate	266	81.34
High	55	16.81
Total	327	100

It was found that only 16.81% have high level of attitude, 81.34% have moderate and only 1.834 % of elementary school teachers have low attitude towards MDMS. Most of the elementary school teachers have a moderate level of attitude towards Scheme.

(ii) To study significance of difference in the attitude of elementary school teachers towards MDMS on the basis of sex, t- test was done . The results are summarized in table 2 :

Table 2: Showing t – ratio (Attitude of elementary school teachers on the basis of Sex)

Sex	N	Mean	SD	t- ratio	Level of Significance
Male	103	121.21	23.47	2.338	S*
Female	224	114.77	22.439		

(S* = significant at 0.05 level)

The calculated t- value is significant at 0.05 level. Thus, the null hypothesis Ho1 stands rejected. Therefore there really exists significant difference in the attitude of teachers towards MDMS. The mean value of male teachers is more than the female teachers. So male teachers have more favourable attitude towards MDMS than female teachers.

(iii) To study significance of difference in the attitude of elementary school teachers towards MDMS on the basis of their Education Level, ANOVA was done. The results are summarized in table 2.

International Journal of Novel Research in Humanity and Social Sciences

Vol. 3, Issue 3, pp: (53-59), Month: May – June 2016, Available at: www.noveltyjournals.com

TABLE 3: Difference in the attitude of elementary school teachers on the basis of Education Level

Source of Variation	Sum of Squares	df	Mean Square	F- ratio	Level of Significance
Between Groups	38.940	98	.397	.906	NS*
Within Groups	99.965	228	.438		

(NS* not significant at 0.05 level)

From Table 3 it can be concluded that F- ratio is not significant and the null hypothesis Ho2 could not be rejected. However, in order to test inter group differences it was decided to apply t-test and the results are summarised in table 4.7:

Table 4: Showing t- ratio between different groups of educational level

Educational Level	N	Mean	S.D.	t-ratio	Level of Significance
Intermediate	37	123.081	18.864	1.944	NS*
Graduate	199	116.1893	24.147		
Intermediate	37	123.081	18.864	3.694	S**
Post- Graduate	121	115.639	22.163		
Graduate	199	116.1893	24.147	0.179	NS*
Post- Graduate	121	115.639	22.163		

(NS* Not significant at 0.05 level, S** Significant at 0.01 level)

Table 4 shows that the t-ratio between teachers having intermediate as their educational qualification and teachers having post graduate degree was found to be significant at 0.01 level. Thus it can be claimed that there is significant difference in the attitude of elementary school teachers having intermediate as their qualification and teachers having post graduate degree. Teachers who were intermediate passed (M= 123.081) have more favourable attitude towards MDMS as compared to teachers having post graduate degree. (M= 115.639).

(iii) To study significance of difference in the attitude of elementary school teachers towards MDMS on the basis of their annual income, F - ratio was calculated.

Table 5: Showing F-ratio Attitude of teachers on the basis of their annual income

Source of Variation	Sum of Squares	df	Mean Square	F- ratio	Level of Significance
Between Groups	70.564	98	.720	1.031	NS*
Within Groups	159.252	228	.698		

(NS* Not significant at 0.05 level)

The obtained F-ratio in table 5 is not significant and the null hypothesis Ho3 could not be rejected. However, in order to test inter group differences t-test was applied and the results are summarised in table 6:

Table 6: Showing t – ratio (Attitude of teachers on the basis of Annual Income)

Annual Income	N	Mean	S.D.	t-ratio
Below one lakh	45	112.644	20.13833	1.393*
Between 1 & 2 lakhs	176	117.460	22.70855	
Below one lakh	45	112.644	20.13833	0.841*
Between 2 & 3 lakhs	72	116.152	24.53894	
Below one lakh	45	112.644	20.13833	1.872*
Above 3 lakhs	34	119.911	24.21541	
Between 1 & 2 lakhs	176	117.460	22.70855	0.389*
Between 2 & 3 lakhs	72	116.152	24.53894	
Between 1 & 2 lakhs	176	117.460	22.70855	0.818*
Above 3 lakhs	34	119.911	24.21541	
Between 2 & 3 lakhs	72	116.152	24.53894	0.085*
Above 3 lakhs	34	119.911	24.21541	

(* Not significant at 0.05 level)

From Table 6, it is evident that none of the t - ratios is significant. It means that elementary school teachers do not differ in their attitude towards MDMS on the basis of their annual income. It should be noted that in Bihar a large percentage of teachers in schools are contractual teachers who are low paid.

6. CONCLUSIONS

The study was aimed to study the perception of Elementary School government teachers towards Mid Day Meal Scheme. It was found that 81.34 % of the elementary school teachers have a moderate level of attitude towards Mid- day meal scheme. It means that the scheme is important in terms of its potential of improving the health of the younger generation and increase in enrolment and retention rate. Only 16.81% of the teachers have high level of attitude. It means that teachers have to face a number of problems in the execution of the Scheme and teaching is hampered. The findings indicated that male teachers have more favourable attitude towards MDMS than female teachers. There is significant difference in the attitude of elementary school teachers having intermediate as their educational qualification and teachers having post graduate degree towards MDMS in Bihar. It means more higher the educational qualification, less is their attitude. No significant difference was found on the basis of annual income.

Mere financial allocations to the various schemes cannot deliver the goods. Although in Bihar there has been increase in access rates and a significant increase in classroom infrastructure, many low- income parents are prepared to pay to send their children to private schools, especially boys, as they see non-government, low fee schools providing better quality teaching, learning and facilities. Central factors that determine the success of educational programmes are related to the quality of teachers, the quality of teaching - learning materials, and the quality of the teaching strategies. Building a nation's human resources takes time, because unlike infrastructure which can come up quickly, human development calls for a lifetime of investments in health, nutrition and education. An educated, skilled and talented population can be a country's strongest asset in a rapidly changing world.

REFERENCES

- [1] ASER. (2014). *Annual Status Of Education Report*. Retrieved on 12.10.15. from <http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202014/National%20PPTs/aser2014indiaenglish.pdf>
- [2] Baru, R. et al. (2008). Full Meal or Package Deal? In *Economic and Political Weekly*, 14 June 2008. Retrieved on 12.2.15 from <http://www.righttofoodindia.org/data/barueta108full-meal-or-package-deal.pdf>
- [3] Blue, J. (2005). *The Government Primary School Mid-day Meals Scheme: An Assessment of Programme Implementation and Impact in Udaipur District*. Sewa Mandir. Udaipur. Retrieved on 13.8.15 from <http://www.righttofoodindia.org>
- [4] British Council. (2016). *English in Education. Bihar Profile*. Retrieved on 22.4.16 from https://www.britishcouncil.in/sites/default/files/bihar_education_summary_report.pdf
- [5] Chauhan, S.D.(2011). *A study of mid-day meal programme in the government primary schools of Gwalior city of Madhya Pradesh*. Retrieved on 13.8.15 from <http://shodhganga.inflibnet.ac.in/handle/10603/32848>
- [6] Deodhar, S. Y. ; Mahandiratta, S. ; Ramani, K.V. ; and Mavalankar, D. (2010). An Evaluation Of Mid Day Meal Scheme. *Journal Of Indian School Of Political Economy*. Jan-Dec 2010. Retrieved on 12.05.13 from [http://www.iimahd.ernet.in/~satish/MDMJISPEPaper\(2\).pdf](http://www.iimahd.ernet.in/~satish/MDMJISPEPaper(2).pdf)
- [7] Dreze, J and Goyal, A. (2003). The Future of mid day meals. *Economic and Political Weekly*. 38(44).Nov, 1 Retrieved on 10.10.15 from <http://econweb.umd.edu/~goyal/Mid-dayMealsEPW.pdf>
- [8] Fritz, M F. (2007). The Effect of Diet on Intelligence and Learning. *Psychological Bulletin*. 32(5). 355-363. Retrieved on 23.6.15 from <http://www.sciencedirect.com>
- [9] Giri, P. (2013). Effectiveness of Mid-Day Meal As Perceived by the Teachers and the Guardians 2(8) ISSN 2277-11821. *Anubhav. National Monthly Refereed Journal Of Research In Arts And Education*. Retrieved on 10.10.15 from www.abhinavjournal.com

International Journal of Novel Research in Humanity and Social Sciences

 Vol. 3, Issue 3, pp: (53-59), Month: May – June 2016, Available at: www.noveltyjournals.com

- [10] Hamid, Y. and Asmat. (January 2012). Mid-Day Meal Scheme & Growth of Primary Education a Case Study of District Anantnag in Jammu & Kashmir. *Journal of Sociology*.9 (1). Retrieved on 01/09/2013 from [.http://mpira.ub.uni-muenchen.de/17386/](http://mpira.ub.uni-muenchen.de/17386/)
- [11] Jain, J. and Shah, M. (2005). Antyodaya Anna Yojana and Mid-day Meals in MP. *Economic and Political Weekly*. 26 Nov. 5076-88
- [12] Josephine, Y. and Vetukuri, P.S.R. (2008). *Best Practices in the implementation of mid-day meals programme in Andhra Pradesh*. Retrieved on 12.08.15 from <http://www.educationforallindia.com/best-practices-mid-day-meal-in-andhra-pradesh-by%20joshpine-yazali.pdf>
- [13] Kaor, I. and Verma, L.K. (2015). Attitude of Teachers Towards the Success of Sarv Shiksha Abhiyan and Mid Day Meal Scheme. *Indian Journal of Applied Research*. 5(10). Retrieved on 12.04.16 from http://www.worldwidejournals.com/ijar/file.php?val=October_2015_1444106845
- [14] Kumar, P. and Sood, T. (2005). *Bihar : A Mid-day Meal survey in East Champaran and Supaul districts of Bihar*. Retrieved on 12.08.15 from <http://www.create-rpc.org/database/search.php?sqlQuery=SELECT%20author>
- [15] Kumar, A. (2008). Teachers' Perceptions towards National Programme of Nutritional Support to Primary Education (Mid-Day Meal Scheme). *The PrimaryTeacher*. xxxiii (1-2). January And April 2008.
- [16] Kumar, A. (2015). *Two years on Masrakh Tragedy still haunts Bihar MDM scheme*. Hindustan Times. Patna Edition. Dated 17 July 2015.
- [17] Laxmaiah, A.; Sarma, K.V. R; Rao D.H; Reddy, C.G; Ravindranath, M; Rao, M.V and Vijayaraghavan, K.(1999). *Impact of mid day meal program on educational and nutritional status of school children in Karnataka*. Retrieved on 12.10.15. from <http://indianpediatrics.net/dec-99/99-dec-3.htm>
- [18] Levinger, B. (1994). *School Feeding Programme: Myth and Potential*. In *Report of Committee on Mid-Day Meal* (1995). Govt. of India. 65. Retrieved on 12.10.15. from <http://www.create-rpc.org/database/search.php>
- [19] Mohanty, R. I. (2010). *About Kids Health. Primary education in India 10.10.2010*. Retrieved on 19.10.15. from <http://www.aboutkidshealth.ca/en/news/newsandfeatures/pages/primary-education-in-india.aspx>
- [20] Morris, Neil & Sarll, Peter (2001). Drinking Glucose Improves Listening Span in Students who miss Breakfast. *Journal of Educational Research*. 43 (2) 201- 207.
- [21] Nambiar, V.S and Desai, R. (2013). Knowledge Attitude practice of school teachers, students and mid day meal staff towards the mid day meal programme. *Archives of Pharmacy and Biological Sciences* .www.journalaphra.com
- [22] NIDAN. (2014). *Assessment of Mid-Day Meal Scheme in PLAN intervention Districts of Bihar Alliance to Covert Vision in Developmental Action (ACVIDA)*. Retrieved on 20.04.15 from <http://nidan.in/nidanwp/wp-content/uploads/2014/07/Assessment-Of-MDM-Final-Study-Report.pdf>
- [23] Nielsen, A.C. (2007). Mid-Day Meal Programme for School Children Akshayapatra-Unlimited Food for Life. *Journal of Community Guidance and Research*. 26(1). March 2009.
- [24] Panda, S.K. & Sahu, L.P. (2007). Quality in Elementary Education: A Prospective Issue. *Edutracks*, 6(10). 9-10.
- [25] Panda, B.K. (2010). Achieving Universal Primary Education- Mid Day Programme in Residential Schools For The Scheduled Tribes in Chattisgarh. *Journal of Indian Education*.34(4).
- [26] Patibandla, A. (2013). A Research on Mid Day Meal Scheme in Primary Schools of Nandigama Mandal Krishna District, Andhra Pradesh. Retrieved on 12.4.16 from http://www.tanseca.com/magazines/tansecamagazines_120708449569281_16neperusrCognitive%20Semiotics.pdf
- [27] Paul, P.K. and Mondal, N. K. (2012). Teachers' Perceptions towards National Programme of Nutritional Support to Primary Education (Mid-Day Meal Scheme). *International Journal of Research in Social Sciences*. 2 (3). Aug 2012.

International Journal of Novel Research in Humanity and Social Sciences

 Vol. 3, Issue 3, pp: (53-59), Month: May – June 2016, Available at: www.noveltyjournals.com

- [28] Report of 5th Joint Review Mission on Mid-Day Meal Scheme Bihar. (2013). *Ministry of HumanResource Development. Department of School Education & Literacy*. Retrieved on 20.10.15 from http://mdm.nic.in/Files/Review/Fifth_Review/Bihar/Bihar_JRM_Report_MDMS-2013.pdf
- [29] Ruhi, O. and Linden, T. An Education in India's Learning Outcomes. *Hindustan Times*. Pg 8. Patna Edition. Dated 13 April 2016
- [30] Salomi, V. (2013). 1.5 Crore Kids go hungry as Bihar teachers stay off mid day meal duties. *The Times of India*. Patna Edn. July 26, 2013.
- [31] Sarkar , K and Bhattacharyya, D. (2015) . Attitude Of Teachers' Towards Mid-Day Meal. Retrieved on 20.10.15 from <http://researchdirection.org/UploadArticle/400.pdf>
- [32] SCERT .(2014). Study of Impact of Mid-Day Meal (MDM) Programme on School Enrolment & Retention. Final Report. *State Council for Educational Research & Training, Chhattisgarh*. August 2014. Retrieved on 12.10.15 from <http://scert.cg.gov.in/pdf/researchpapers/studyreports/MDM%20Chattisgarh%20Final%20Report.pdf>
- [33] Singh, M. (2015). *Teacher Effectiveness and Non-Cognitive factors*. Janaki Prakashan. Patna.
- [34] Singh, M and Mishra, N.(2010). Evaluative study on MDM Programme in Meghalaya. Retrieved on 12.6.15from <http://docplayer.net/12493237-Evaluation-study-on-mid-day-meal-programme-in-meghalaya.html>
- [35] Sood, T. and Kumar, A. (2004). Report of Mid Say Meal Survey in East Champaran and Supaul Districts. Retrieved on 12.6.15 from <http://www.righttofoodindia.org>
- [36] Swain, B.C. & Sahu, A.N. (2014). Mid bay Meal Programme in the Primary Schools of Odisha: An Evaluative study. *Scholarly Research Journal For Humanity Science and English Language*. Retrieved on 12.10.15 from <https://www.academia.edu/13012936/>
- [37] Uma. (2013). Mid-day Meals Scheme and Primary Education in India: Quality Issues. *International Journal of Scientific and Research Publications*. 3(11).November 2013 1. Retrieved on 12.10.15 from <http://www.ijsrp.org>
- [38] UNESCO. (2015).*Global Monitoring Report*. 2015. Retrieved on 12.2.16 from <http://unesdoc.unesco.org/images/0023/002322/232205e.pdf>
- [39] World Education Report. (1988). *Teachers and Teaching in the changing world*. UNESCO Publishing.