



IMPACT OF MID-DAY MEAL SCHEME ON ENROLMENT AND RETENTION OF SCHOOL CHILDREN IN NELLORE DISTRICT

Dr. B. Ramesh Kumar
Assistant Professor (C)
Department of Economics
VSU College, Kavali-524 201

ABSTRACT

India's Mid-Day Meal Scheme (MDMS) aims to combat malnutrition and promote education among primary school children, especially in underprivileged areas like Nellore Municipal Corporation. A study on MDMS beneficiaries revealed that a majority (44%) belongs to the backward class and 26% are minorities, with 76% from poor income groups and 10% from small/marginal farmer families. The scheme has shown positive impacts: 84% of respondents found the food quality good (though 14% considered it poor), and 82% reported improved health after MDMS. Furthermore, 60% of Headmasters noted increased enrolment due to MDMS, while 40% observed no change. The report recommends implementing guidelines for menus and cost norms, improving supervision, and enhancing infrastructure like kitchen sheds and water facilities. MDMS serves as a crucial intervention, improving health, nutrition, and learning outcomes, while also boosting school attendance and empowering local women.

Key words: *malnutrition, enrolment, retention, promotes education.*

INTRODUCTION

Food and education represent significant and ongoing challenges for India's underprivileged population. Nutrition and health are fundamental prerequisites for the development of human resources within the nation. There is a direct and undeniable link between adequate nutrition, overall health, human resource development, national productivity, and ultimately, the country's economic growth and prosperity.

Conversely, malnutrition presents a complex and multifaceted problem. It acts as both a cause and an effect within a cycle of poverty and poor health, perpetuating across generations. This issue is deeply intertwined with other societal problems, including illiteracy (particularly among women), inadequate access to safe drinking water and sanitation, widespread ignorance, lack of awareness about health and hygiene, and general poor health. Malnutrition thus creates its own detrimental cycle within the broader context of poverty. Furthermore, malnutrition significantly hinders the Universalization of Elementary Education (UEE). A child suffering from malnutrition, even if attending school, often struggles to concentrate, engage, and effectively participate in learning activities. It was in response to these critical issues that the Mid-Day Meal Scheme (MDMS) was initiated. The scheme had two primary objectives: firstly, to improve the nutritional status of children, and secondly, to provide them with access to basic education. Therefore, the MDMS was fundamentally introduced to foster the holistic development of primary school children's education and well-being.

OBJECTIVES

1. Evaluate the influence of the Mid-Day Meal Scheme (MDMS) on student enrollment, attendance, and retention within the specified study area.
2. Identify and address challenges encountered during the implementation of the Mid-Day Meal (MDM) program.
3. Assess the level of satisfaction among both students and teachers regarding the execution and effectiveness of the scheme.
4. Propose recommendations to enhance the overall implementation of the program.

METHODOLOGY AND SAMPLE DESIGN

The study utilized primary data collected from school children and Head Masters within the Nellore Municipal Corporation area. For this research, three primary schools and two high schools were selected. A random sampling method was employed to choose beneficiaries of the mid-day meal scheme, involving approximately 50 school children from grades 1-6 and 5 Head Masters from the chosen schools.

Primary data was gathered using a structured questionnaire administered to both school children and Head Masters. The student respondents provided information on their demographic characteristics, utilization of the MDMS, benefits of the scheme (such as improved physical fitness), and any challenges encountered. Head Masters offered insights into the advantages of MDMS, including increased enrollment, better attendance, and enhanced student interest in studies, as well as problems in its implementation.

IMPACT OF MDMS ON ENROLMENT AND RETENTION IN NELLORE DISTRICT

The midday meal programme is being implemented in every government school to improve regular attendance in the class room and health among the children. Under this scheme every child who is studying in these schools have right to eat midday meal. The MDM program has a considerable impact on treating the problem of under nutrition among Indian school-aged children

Table-1 provides information about the sample schools included in a survey, likely conducted in the Nellore Municipal Corporation area. The survey involved 50 respondents in total, with 10 respondents drawn from each of the five identified sample schools. All sample schools are located within the Nellore Municipal Corporation. The specific villages/wards covered are BV Nagar, Kesava Nagar, Vengalrao Nagar, and Chemudugunta. BV Nagar appears twice, indicating two different schools or distinct sections within that area were sampled.

The sample includes both High Schools and Primary Schools. Specifically, two High Schools (in BV Nagar and Vengalrao Nagar) and three Primary Schools (in Kesava Nagar, BV Nagar, and Chemudugunta) were included. Each of the five selected schools contributed equally to the sample, with 10 respondents from each, summing up to the total of 50 respondents.

The sample selection appears to be evenly distributed, with 10 respondents drawn from each of the five identified locations/school types, ensuring equal representation across these categories. The sample includes both high schools and primary schools, and covers different wards within the Nellore Municipal Corporation.

Table – 1: Details of Sample Schools

S. No.	Block	Village/Ward	Type of School	No. of Sample Respondents
1	Nellore Municipal Corporation	BV Nagar	High School	10
2	-do-	Kesava Nagar	Primary	10
3	-do-	BV Nagar	Primary	10
4	-do-	Vengalrao Nagar	High School	10
5	-do-	Chemudugunta	Primary	10
Total				50

Source: Field Survey

Table-2 details the gender distribution among the 50 respondents from the sample schools. Out of the 50 respondents, 28 are male and 22 are female. Males constitute 56.0% of the total respondents, while females account for 44.0%. The sample has a higher proportion of male respondents compared to female respondents. The sum of male and female respondents (28 + 22 = 50) matches the total number of respondents.

The sample exhibits a higher proportion of male respondents compared to female respondents, with males accounting for over half of the total participants. This distribution reflects the gender composition within the surveyed population or the sampling methodology employed.

Table-2: Distribution of the Respondents on the Basis of Gender

Gender	Number	Percent
Male	28	56.0
Female	22	44.0
Total	50	100.0

Source: Field Survey

The distribution of the respondents on the basis of age summarizes the age distribution of 50 respondents, categorizing them into five age groups and showing the number and percentage of respondents in each group. The table clearly indicates a total of 50 respondents, which corresponds to 100.0% of the distribution, confirming the completeness of the data presented in table-3.

The largest proportion of respondents falls within the 7-8 years age group, accounting for 17 respondents or 34.0% of the total. This indicates that this age range represents the most significant segment of the surveyed population.

The 9-10 years age group is the second most represented, with 14 respondents, making up 28.0% of the total. This group, along with the 7-8 years group, collectively represents over 60% of the respondents, highlighting a concentration in the middle childhood

years. The 5-6 years age group includes 7 respondents, or 14.0% of the total. This group is notably smaller than the 7-8 and 9-10 years groups. The 11-12 years age group comprises 11 respondents, representing 22.0% of the total. This group is larger than the youngest group but smaller than the two central age groups. The "Above 13" age group has the smallest representation, with only 1 respondent, accounting for a mere 2.0% of the total. This suggests that the survey or study primarily focused on younger age demographics.

The data reveals a clear emphasis on respondents in the 7-12 years age range, with the 7-8 years group being the most prominent. The representation significantly decreases at the younger (5-6 years) and older (Above 13 years) ends of the spectrum.

Table – 3: Distribution of the Respondents on the Basis of Age

Age in Years	Number	Percent
5-6	7	14.0
7-8	17	34.0
9-10	14	28.0
11-12	11	22.0
Above 13	1	2.0
Total	50	100.0

Source: Field Survey

The distribution of the respondents on the basis of social category provides a breakdown of respondents by caste and minority status, along with their respective numbers and percentages out of a total of 50 respondents is presented in table-4.

The data is based on a total of 50 respondents, providing a clear numerical and percentage distribution across these social categories. The percentages sum up to 100.0%, confirming the complete distribution of the surveyed population across these social categories. Out of these Comprising 9 respondents, this group represents 18.0% of the total, indicating a notable presence within the surveyed population. With 4 respondents, the ST community accounts for 8.0% of the total, suggesting a smaller but still significant proportion. This category forms the largest group, with 22 respondents, making up 44.0% of the total. This highlights the substantial representation of the BC community among the respondents. The OC group is the smallest, with only 2 respondents, representing 4.0% of the total. This distinct group includes 13 respondents, constituting 26.0% of the total. This indicates a significant proportion of individuals from minority communities within the surveyed population.

The community of respondents is primarily composed of individuals from the Backward Classes (BC), followed by a significant presence of Minorities and Scheduled Castes (SC). Scheduled Tribes (ST) and Other Castes (OC) represent smaller proportions of the surveyed population. This distribution highlights the diverse social background of the respondents, with a clear dominance of certain social categories.

Table – 4: Distribution of the Respondents on the basis of Social Category

Caste	Number	Percent
SC	9	18.0
ST	4	8.0
BC	22	44.0
OC	2	4.0
Minorities	13	26.0
Total	50	100.0

Source: Field Survey

The distribution of the Respondents on the basis of father occupation provides a breakdown of the occupations of the fathers of 50 respondents, along with the percentage each occupation represents of the total is presented in table-5.

The largest occupational group is Agriculture Labour, accounting for 23 respondents, which is 46.0% of the total. This indicates that nearly half of the respondents' fathers are engaged in agricultural labor, suggesting a predominantly agrarian or rural background for the surveyed population.

Non Agriculture Labour is the second-largest category, with 15 respondents, making up 30.0% of the total. This highlights a substantial portion of the population engaged in non-agricultural manual labor. Farmer (Small and Marginal) represents 5 respondents, or 10.0%. This indicates a presence of small-scale farming within the surveyed group's parental occupations.

Govt/Private Employee accounts for only 2 respondents, or 4.0%. This lpercentage suggests a limited presence of formal sector employment among the fathers of the respondents.

Self-Employment includes 3 respondents (6.0%), while other occupations account for 2 respondents (4.0%). These categories represent smaller, diverse segments of the occupational landscape.

The survey included a total of 50 respondents, with the percentages summing up to 100.0%, confirming the complete distribution of the surveyed population based on their fathers' occupations.

The analysis reveals that the majority of respondents' fathers are engaged in manual labor, particularly Agriculture Labour (46.0%) and Non Agriculture Labour (30.0%). Formal employment in government or private sectors is notably low at 4.0%, suggesting a predominantly informal or agrarian economic background for the surveyed population. Small and marginal farming also constitutes a significant portion at 10.0%.

Table – 5: Distribution of the Respondents on the basis of Father occupation

Occupation	Number	Percent
Farmer(Small And Marginal)	5	10.0
Agriculture Labour	23	46.0
Non Agriculture Labour	15	30.0
Govt/Private Employee	2	4.0
Self –Employment	3	6.0
Other	2	4.0
Total	50	100.0

Source: Field survey

The midday meal programme is being implemented in every government school to improve regular attendance in the class room and health among the children. Under this scheme every child who is studying in these schools have right to eat midday meal. The table-6 depicts that 46 (96.0 percent) students received mid-day meals six days in a week. Only 8 percent of students said that they rarely received Mid-Day Meal.

Table – 6: Response of the Students about Regularity of Mid-Day Meal

Response	Number	Percent
Yes	46	92.0
No	4	8.0
Total	50	100.0

Source: Field Survey

The table-7 indicates 84.0 percent of the respondents expressed that the quality of the food given to the children is good and 12.0 percent of the respondents stated that the quality of food is poor. Some students said that the food provided was limited in quantity. Thus, it is clear from the above analysis that the food provided to the students is of the good quantity and they relish the food.

Table – 7: Response of the Student about the Quality of Mid-Day Meal

Response	Number	Percent
Good	42	84.0
Average	6	12.0
Poor	2	4.0
Total	50	100.0

Source: Field Survey

To check preference of the students, various combinations of weekly menu were examined. The table-8 displays that a majority of 76.0 percent of the students said that the menu will be changed every day and it does not repeat the next day. However, recently egg was added to menu and it will be provided five times in a week. About 24.0 percent of the respondents said that some times, the menu will be altered due to unavailability of materials prescribed for the day.

Table – 8: Response of the Students about the Menu List

Does the Menu List will be Same as Every Day	Number	Percent
Yes	38	76.0
No	12	24.0
Total	50	100.0

Source: Field Survey

All students responded in unison that there is no discrimination with any student belonging to any section of society in the school at the time of distribution of mid-day meal. For taking mid-day meal students sit freely with each other without any consideration of caste. Generally, they like to sit with their close friends irrespective of the caste of the friend. The table-9 displays that the large majority (80.0 percent) sit together, whereas 8.0 percent students opined that a few of them sit a side sometimes after coming for meal in second term. A negligible 4.0 percent student sits separately while they not well.

Table – 9: Response of the Students about eating Mid-Day Meal together at the School

Eating Mid-Day Meal Together at the School	Number	Percent
Yes	40	80.0
No	2	4.0
Some Times	8	16.0
Total	50	100.0

Source: Field Survey

Availability of safe and secure drinking water is also a major prerequisite for the implementation of mid-day meal scheme. In the following table-10, it has been found that 66.0 percent of the students reported the availability of proper water facility in the school and only 34.0 percent said that they did not have proper water facility.

Table – 10: Response of the Students regarding Water Facility

School have proper water facility	Number	Percent
Yes	33	66.0
No	17	34.0
Total	50	100.0

Source: Field Survey

The table-11 displays the response of the students regarding other provisos of the mid-day meal scheme in their schools. Nearly 84.0 percent students said that they receive chiki and raagi malt on the day by day basis along with mid-day meal and some students said that they get vitamin or iron tablets occasionally.

Table – 11: Response of the Students regarding other provisions of the MDMS

Other Provisions of MDMS	Number	Percent
Chiki	24	48.0
Ragi malt	18	36.0
Vitamin / Iron Tablets	6	12.0
Can't say	2	4.0
Total	50	100.0

Source: Field Survey

The table-12 reveals the changes in the health condition of the students after utilizing Mid-Day Meal Scheme. Out of 50 students under study a majority of 82.0 percent respondents felt that there is some improvement in their health condition after the implementation of MDMS in their schools, and only 18 percent of students are not able to find any changes in their health status with regard to MDM Scheme.

Table – 12: Response regarding improvement in Health Condition After Utilizing MDMS

Response	Number	Percent
Yes	41	82.0
No	9	18.0
Total	50	100.0

Source: Field Survey

The table - 13 conveys the problems encountered by the respondents with regard to utilizing mid-day meal scheme. Out of 50 students only 34.0 percent of them said that they are facing some issues like insufficient food, tasteless food and they also mentioned that the serving staff showed reckless behaviour towards the students. But a majority of 66.0 percent students does not raise any complaint against the mid-day meal scheme.

Table-13: Response of the Students Regarding Problems in Utilizing MDM Scheme

Response	Yes	No	Total
Food is not Adequate	8(16.0)	12(24.0)	20(40.0)
Food is not Tasty	6(12.0)	14(28.0)	20(40.0)
MDMS Staff were Harsh	3(6.0)	7(14.0)	10(20.0)
Total	17(34.0)	33(66.0)	50(100)

Source: Field Survey

Response of the Headmasters Regarding Enrolment and Retention of Students

The response regarding increase in enrolment has been obtained from the head masters of the selected schools is obtained in the sample survey and it revealed that all of them have replied that MDMS has been obviously helped in increase in the enrolment of the students in their schools.

With respect to the response regarding increase in attendance level of the students after utilization of the MDMS, all the head masters of the selected schools replied that the attendance levels have been increased due to implementation of MDMS. Further, the response of the head masters regarding increase in the interest level of the students towards studies after utilizing MDMS, all of them have been replied that the students are more interested towards their studies after utilizing the MDMS. They also indicated that the learning ability of the students has been increased due to utilization of the MDMS.

Table – 14: Response of the Head Masters Regarding and Attendance and Enrolment of Students

Name of the School	Increased Attendance After Launching MDMS	
	Yes	No
KNR ZPH School - BV Nagar	1	
KNR Primary School – BV Nagar	1	
ZP High School –Kesavnagar		1
Primary School - Vengalrao Nagar	1	
Primary School – Chemudugunta		1
Total	3 (60%)	2 (40%)

Source: Field Survey

On the question regarding increase in enrolment, maximum number of Headmasters (60.0 percent) responded that there is increase in enrolment at all and 40.0 percent Headmasters noticed that there no increase in enrolment in their school as a result of Mid-Day Meal Scheme. However, the majority of the Headmasters noticed much increase in the enrolment of students after the introduction of Mid-Day Meal Scheme.

Presently there is continuous decline per year in the enrolment of students in government primary and upper primary schools of Andhra Pradesh and students are moving towards nearby private English medium schools. There is urgent need to probe into the situation and finding the reasons.

Table – 15: Response of the Head Masters Regarding Retention of Students

Name of the School	Retention of the Students Increased After Launching MDMS	
	Yes	No
KNR ZPH School - BV Nagar	1	
KNR Primary School – BV Nagar	1	
ZP High School –Kesavnagar		1

Primary School - Vengalrao Nagar	1	
Primary School – Chemudugunta	1	
Total	4 (80.0%)	1 (20.0 %)

Source: Field Survey

Maximum number of Headmaster (4) considered that there is much increase in the attendance of students after the implementation of cooked Mid-Day Meal Scheme, whereas only one Headmaster said that there is no significant impact of MDMS on retention of students.

Furthermore, relating to the response of the head masters regarding the problems in implementation of MDMS, they replied that delay in releasing the funds is the major problem followed by insufficient salaries to the helpers and insufficient storage facilities for keeping the material related MDMS.

The teachers presently working in government schools of Andhra Pradesh have expressed that this scheme is helping to retain the students in school after post lunch sessions and hence improving the attendance in both the sessions i.e. pre-lunch and post lunch sessions.

CONCLUSION

A majority of the beneficiaries belong to the Backward Class (44%) and minorities (26%), with 76% from poor income groups and 10% from small and marginal farmer families. 84% of respondents found the food quality good, though 14% considered it poor, and some noted limited quantity. No discrimination was reported during meal distribution. 82% of students felt an improvement in their health after MDMS implementation, while 18% saw no change. 60% of Headmasters reported increased enrollment due to MDMS, while 40% observed no change. The report suggests implementing proper guidelines for weekly menus and cost norms, establishing supportive supervision systems, enhancing cooking cost allocation for better quality meals, linking MDM with school health programs for hygiene and nutrition education, and providing necessary infrastructure like kitchen sheds and water facilities, potentially funded by NREGA.

India's Mid-Day Meal program is a crucial intervention with multiple benefits. It has improved children's health and nutrition, combating malnutrition and supporting physical and cognitive development, leading to better learning achievements and reduced stunting and wasting rates. The program acts as a strong incentive for school attendance, especially for economically disadvantaged children, increasing enrollment and decreasing dropout rates. Additionally, it fosters a favorable learning environment by addressing hunger during lunchtime, and contributes to socioeconomic development by empowering local women as chefs and helpers and promoting regional agriculture through local food sourcing.

REFERENCES:

1. E, Mohammed, Ali, Seid , C, Kassahun , C, Wubneh , E, Mekonen And B, Shetie .2021. Determinants of under nutrition among private and public primary school children .department of paediatrics and child health.
2. C, Egbe S, Balle , S, Nambile And K, Juma. (2019). A Cross-Sectional Survey On The Prevalence Of Anaemia And Malnutrition In Primary School Children In The Tiko Health District. Elvis Akwo Ngoh, Eric Achidi Akum, Esum Mathias Eyong Pan African Medical Journal. Retrieved On March, 2019.
3. Ministry of Health and Family Welfare Government of India, UNICEF and Population Council.Comprehensive National Nutrition Survey (CNNS) National Report, 2016–18. New Delhi, India; 2019.
4. Ali, J., & Akbar, M. (2015). Pupils' satisfaction with school mid-day meal program: A comparative study of centralized versus decentralized kitchens. *British Food Journal*, 117(7), 1933-1948.
5. Maneesh, P. (2015). Mid day meals and food security among children: Assuring nutritional security of Tamil Nadu. *Indian Journal of Economics and Development*, 3(9), 1-5.
6. Sahu, A. N., & Swain, B. C. (2015). Implementation of Mid-day Meal Programme in Primary Schools of Odisha-An Overview. An International Peer Reviewed & Referred. *Scholarly Research Journal for Humanity Science & English Language*, 2(9), 2170-2182.
7. Sengupta, Somini. Malnutrition of children in India continues. *Nytimes.com*. Retrieved on 2012-02-18. 2012.
