

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

**Dr. B. Ramesh Kumar<sup>1</sup>, Prof. N.R.V. Ramana Reddy<sup>2</sup>, M. Hari Priya<sup>3</sup>**

<sup>1</sup>Assistant Professor (C), VSU College, Kavali-524 201, Department of Economics

<sup>2</sup>Department of Economics, VSU College, Kavali-524 201

<sup>3</sup>M.A Eco. (Final Year), VSU College, Kavali-524 201

### **Abstract:**

Food and education are the most challenging problems of India's underprivileged issues. Nutrition and Health are pre-requisites for human resource development. Nutrition is directly linked to human resource development, productivity and ultimately to the nation's growth. Malnutrition on the other hand is a complex phenomenon. It is both the cause and effect of poverty and ill health: and follows a cyclical, inter-generational pattern. It is inextricably linked with illiteracy, especially female illiteracy, lack of safe drinking water, sanitation, ignorance, lack of awareness and ill health. It creates its own cycle within the large cycle of poverty. Malnutrition adversely affects Universalization of Elementary Education (UEE). Even if a malnourished child does attend school, he/she finds it difficult to concentrate on and participate in the learning activities in school. The MDMS was started with two major objectives firstly to enhance the child's nutrition level secondly to provide the basic education. Thus the MDMS was introduced basically to improve the overall development of the primary school children's education.

Apart from the education, the nutritional aspects of MDMS have several dimensions including elimination of classroom hunger, the growth of school children's health. It is argued that if the children come every-day to school they can eat nutritious meal regularly and therefore child starvation could be checked. In this context, higher attendance in school provides opportunity to implement MDMS which enable children to have meals and to be physically and mentally fit. Thus, the MDM scheme significantly contributes to achieving several Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger), where the scheme directly addresses hunger and malnutrition among children by providing a nutritious meal at school, improving their nutritional status and overall health.

The present study aims to examine the effect of the Mid-day Meal Scheme on the enrolment and retention of school children in Nellore district of Andhra Pradesh.

**Keywords:** Mid-day meal, Education, Malnutrition, Classroom hunger, Starvation)

### **1. Introduction:**

Food and education are the most challenging problems of India's underprivileged issues. Nutrition and Health are pre-requisites for human resource development. Nutrition is directly linked to human resource development, productivity and ultimately to the nation's growth. Malnutrition on the other hand is a complex phenomenon. It is both the cause and effect of poverty and ill health: and follows a cyclical, inter-generational pattern. It is inextricably linked with illiteracy, especially female illiteracy, lack of safe drinking water, sanitation, ignorance, lack of awareness and ill health. It creates its own cycle within the large cycle of poverty. Malnutrition adversely affects Universalization of Elementary Education (UEE). Even if a malnourished child does attend school, he/she finds it difficult to concentrate on and participate

in the learning activities in school. The MDMS was started with two major objectives firstly to enhance the child's nutrition level secondly to provide the basic education. Thus the MDMS was introduced basically to improve the overall development of the primary school children's education.

Apart from the education, the nutritional aspects of MDMS have several dimensions including elimination of classroom hunger, the growth of school children's health. It is argued that if the children come every-day to school they can eat nutritious meal regularly and therefore child starvation could be checked. In this context, higher attendance in school provides opportunity to implement MDMS which enable children to have meals and to be physically and mentally fit. Thus, the MDM scheme significantly contributes to achieving several Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger), where the scheme directly addresses hunger and malnutrition among children by providing a nutritious meal at school, improving their nutritional status and overall health.

## **2. Significance of the Study:**

One cannot work properly on an empty stomach. If adequate food and nutritious is not provided to our children, it is impossible to think of healthy nation. The provision of Mid-day Meal serves as an incentive for children to come to school for education and a better future. A hungry child is less likely to attend school regularly. Chronic hunger can lead to malnutrition and a malnourished child finds it difficult to concentrate on and participate in the teaching learning activities in the school. With a view to bring improvement, Mid day Meal is indeed a great scheme.

## **3. Objectives of the study**

1. To assess the impact of MDMS on the enrolment, attendance and retention of school going children in the study area.
2. To address the issues in implementing MDM programme.
3. To assess the satisfaction of children and teachers about the implementation and impact of the scheme.
4. To provide suggestions for improvement in the implementation of the programme.

## **4. Methodology and Sampling Design:**

The study is based on primary data. The primary data is collected from the school going children from the selected schools in the study area i.e. Nellore Municipal Corporation. For the purpose of the study, 3 primary schools and 2 high schools have been selected in the study area. Random sampling method has been used to select beneficiaries under the mid-day meal scheme in the study area. About 50 school children from 1-6 classes and 5 Head Masters from 5 Schools have been selected for the study.

A structured questionnaire is used for collecting primary data from school children and the Head Masters. Information regarding demographic characteristics of the respondents, details of utilisation of MDMS, benefits of MDMS in terms of increase in physical fitness and problems faced by the students in utilization of MDMS has been accrued from the student respondents. Information regarding the advantages of MDMS to the students in terms of increase in enrolment, increase in regular attendance, increase in interest level of the children towards studies and problems in implementation of MDMS is obtained from the Head Masters.

## **5. 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

The Table 1 represents the details of the sample respondents. The researcher has chosen 5 schools in Nellore municipality out of which he selected 3 primary schools and 2 secondary schools. Further he selected 10 students from each school.

**Table - 1**

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
<b>Total</b>				50

**Details of Sample Schools**

Source: Field Survey

**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 table - 2 presents gender wise distribution of students who are studying in 10 government primary and upper primary schools in Nellore district. The table depicted that majority (56.0 percent) of the students are males followed by 44.0 percent are belonging to female.

**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
<b>Total</b>	50	100.0

**Source: Field Survey**

Table - 3 indicates the age wise distribution of Children studying in government schools in the study area. The age wise distribution categorised into five groups, the majority 34.0 % of respondents are in the age group of 7 to 8 years followed by the Children in the age group of 9-10 and the lowest percentage of age group was found in the range of above 13 years of age (2%).

**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 sample respondents according to social groups presented in the table - 4, which reveals that the majority of the sample respondents belongs to the Backward Class accounted for 44.0 per cent followed by minorities at 26.0 percent.

**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 data on occupation status of the respondent's fathers presented in the table - 5 reveals that majority of (46 percent) student's father belong to agricultural labour followed by non-agricultural labours (30 Percent), indicates that 76 percent of children belongs to poor income groups followed by 10 percent who are belong to small and marginal farmers.

**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 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 – 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

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 – 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

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 – 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

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 – 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

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 – 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 - 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 – 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 - 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 – 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

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.

**6. 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 Headmasters 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
<b>Total</b>	<b>3 (60%)</b>	<b>2 (40 %)</b>

**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	
<b>Total</b>	<b>4 (80.0%)</b>	<b>1 (20.0 %)</b>

**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.

**7. Findings:**

It has been found that majority of the sample respondents belongs to the Backward Class accounted for 44.0 per cent followed by minorities at 26.0 percent.

Majority of (46) student’s father belong to agricultural labour followed by non-agricultural labours (30 Percent), indicates that 76 percent of children belongs to poor income groups followed by 10 percent who are belong to small and marginal farmers.

84.0 percent of the respondents expressed that the quality of the food given to the children is good and 14.0 percent of the respondents stated that the quality of food is poor. Some students said that the food provided was limited in quantity.

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. Generally, they like to sit with their close friends irrespective of the caste of the friend.

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.

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.

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 is no increase in enrolment in their school as a result of Mid-Day Meal Scheme.

### **8. Recommendations:**

Proper guidelines with regard to a weekly menu, cost norms, etc, must be made available and displayed in all the schools.

A proper supportive supervision system at the mandal level should be established. For this, systems in other states such as the existence of noon meal organisers.

The allocation for cooking cost should be enhanced making it possible for a better-quality meal including vegetables, eggs, etc.

The MDM should be linked with the school health programme. It can be a useful opportunity for teaching children hygiene, nutrition and health education, etc.

The required infrastructure such as kitchen sheds, utensils, water facilities should be provided. Funds for these can possibly be mobilised from other rural development programmes such as under the NREGA.

### **9. Conclusion:**

In conclusion, India's mid-day meal program has shown to be an important intervention that has multiple advantages for kids, families, and the country as a whole. The children's health and nutrition have improved as a result of the midday meal program. It combats malnutrition and makes sure that kids get the nutrients they need for their physical and cognitive development by serving a balanced and nourishing meal. As a result, pupils' learning achievements have improved and rates of stunting and wasting have decreased.

Additionally, the program has improved schooling. It has served as a potent incentive for kids, especially from economically disadvantaged households, to attend school frequently by providing free meals in schools. As a result, enrolment rates have increased, dropout rates have decreased, and a favorable learning environment has been encouraged. The lunchtime meal is also supplied to help youngsters who are hungry, allowing them to focus better on their schoolwork. The program for midday meals has also benefited socioeconomically. Using local women as chefs and helpers has empowered them economically and created job prospects. By obtaining food from nearby sources, the program also promotes regional agriculture, helping the rural economy.

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