



IMPACT OF MID-DAY MEAL PROGRAMME ON THE NUTRITIONAL STATUS OF PRIMARY SCHOOL CHILDREN

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ABSTRACT

To combat child malnutrition and encourage school attendance, the Indian government's Mid-Day Meal Scheme (MDMS) provides free, healthy meals to students in elementary and middle school. The effect of the Mid-Day Meal Scheme on the growth of elementary school students in the Wazedu mandal of the Jayashankar Bhupalpally district in Telangana is the subject of this thesis. The study's overarching goal is to evaluate the scheme's impact on children's health and education by looking at how it affects their mental growth, diet, school attendance, and test scores.

Keywords: Attendance, academic performance, rural development, public policy, nutrition, child development, primary education, wazedu, and Jayashankar Bhupalpally are all relevant terms in this context.

1. INTRODUCTION

Originating from the Latin terms "educare" and "Educatum," the English word "education" offers a rich history. "Educare" means "to bring up," "to take out," "to draw out," "to train," "to mold," and "bring forward." A "Educatum" is an instructional activity. It examines pedagogy and provides insight into guiding concepts. "Siksha" is an Indo-European loanword from the word "shash" in Hindi. If you want to lead, direct, govern, discipline, etc., "Shash" is the way to go. A person's effective or disciplined behavior is implied by their level of knowledge, according to an old definition.

The term "Shiksha" may refer to a subset of Sanskrit literature in the Indic tradition. The Vedas were intended to be discovered by means of the Sanskrit literature. By "siksha," we mean the norms for pronouncing words. An additional Indic term emphasizes the character of education. "Vidya" implies knowledge, and this is itself. The root word "Bid" (meaning "knowledge") is where the English word "Vidya" comes from (Tagore, 2009)2.

Definition of Education

The term "education" is so broad that it defies easy explanation. Various scholars, politicians, statesmen, philosophers, and educators have offered varying conceptions of education throughout history. The rationale behind this is that education is inherently dynamic, despite its seeming intangibility. The idea of education is dynamic and may continue changing indefinitely. The effect is similar to that of a diamond, which changes its appearance depending on the viewer's perspective. The Latin word "educatum," which consists of the letters "E" and "Duco," is where the English word "education" gets its start. "E" suggests moving inward to

outside, 'Duco' denotes growth or advancement. That is why education is all about growing and improving, both within and outside. According to Chandra (1996), education is all about helping people cultivate their own strengths and potential.3.

Education can be described as a deliberate process that encompasses various fields such as psychology, sociology, science, and philosophy. Its goal is to help individuals reach their full potential and contribute to society's overall development so that everyone can enjoy maximum happiness and prosperity.

Significance of Primary Education

'Primary Education' refers to the first few years of a student's formal education. This is the point when a kid enrolls in a school and begins attending classes on a regular basis in accordance with the curriculum. Although primary education is becoming increasingly

important and popular, some people still believe that "pre-primary" or "nursery" education is more important than the initial stage of the overall educational hierarchy.

Truthfully, elementary school is not a formal schooling program. Parental education, both during and after pregnancy, and a healthy environment for the first few months of a child's life are all part of it. No one can dispute the necessity and significance of pre-primary education, but infants and toddlers do not require or deserve formal schooling. Also, so-called public schools in India do not provide pre-primary education to the vast majority of children from low-income and lower-middle-class families. Thus, the first official stage of the entire educational system is known as "Primary Education."

Any kind of higher education must begin with primary education. It will be challenging to have knowledgeable citizens who are conscious of their obligations if they lack the fundamental understanding. When workers are well-informed, they are able to make better and more efficient use of the country's resources, including its raw materials.

As previously said, the educational framework in India begins with elementary or primary schooling. At its core, it is the educational process.

2. LITERATURE REVIEW

Bihar, Rajasthan, Orissa, Telangana, West Bengal, Madhya Pradesh, Assam, Jammu & Kashmir, Andhra Pradesh, and New Delhi were among the states studied by NCERT (1979)². The study examined the administrations of elementary education in relation to the universalization of elementary education (UEE).

Some of the results from the study, which examined incentive programs in relation to UEE, are as follows.

- School committees in Bihar failed to achieve their goals. Inadequate distribution strategy resulted in incentives not reaching children in need in a timely manner. Amid a lack of suitable and effective incentives, such as the Mid-Day Meal Scheme (MDMS) of the Cooperation for American Relief Everywhere (CARE), and the fact that they were free in tribal regions, there was a demand for it in Rajasthan.

Because they were only distributed at the conclusion of each session, the monthly scholarships for SC and ST had no impact.

- In Orissa, the sample schools' incentives for students who did not show up were insufficient. Students from SC and ST backgrounds were given reading and writing materials by the Tribal and Rural Welfare-Department, and MDM was arranged for by the CARE program at a few chosen schools. Children from SC and ST were more likely to enroll and attend classes after receiving incentives.

- All the deserving kids in Telangana did not gain because the incentives were not plentiful. A certain amount of success in keeping children had been achieved with the CARE's MDMP.

- Students in West Bengal were offered Mid-Day Meals, free textbooks, free uniforms, and attendance scholarships. However, because these incentives were given late, researchers did not examine how they affected enrollment and student retention.

- The local community in Madhya Pradesh offered pupils a variety of incentives, including MDM, to encourage them to attend school.

- Assam did not have a consistent mechanism in place to reward youngsters. Scholarships, clothes, and textbooks were given to students in Jammu and Kashmir who needed them.

Because they were handed out at the end of the school year, Andhra Pradesh's incentives for SC, ST, and girls failed to increase enrollment or attendance; the MDM's per-child budget was also inadequate.

- CARE's MDMP was the only sufficient inducement in New Delhi, but in tribal areas, students received free uniforms, textbooks, and office supplies. Primary school inspection forms omitted questions about community engagement and incentives.

In a study conducted by Seetharaman (1980)³, which was published in the journal NCERT-

Finance, the researchers looked at the educational participation and facility utilization of slum dwellers in Bangalore city, India, and how it was correlated with their socioeconomic status. Included in the sample were

From a total of twenty slums, 1,000 children were randomly chosen, 500 of whom were dropouts and 500 of whom were considered "regular" children.

Some significant findings are as follows:

- During recess, 56.40 percent of the youngsters in poor areas received MDM. Children from low-income families, particularly those whose dads earned less than Rs. 100 per month, were underserved by the MDM program. Compared to children whose mothers stayed at home and raised the family, those whose mothers worked and made more money benefited more from it. Sinha (1998)⁴ observed the operation of different incentive systems in the nation via comprehensive field excursions to twelve states: Rajasthan, Tamil Nadu, Maharashtra, Madhya Pradesh, Telangana, West Bengal, Assam, Andhra Pradesh, Bihar, Orissa, Haryana, and Punjab. He thought the Tamil Nadu Scheme's goal of providing shoes to students was a great social message. But he didn't think universal school lunch programs were essential to getting kids to class. Take Rajgarh, a tribal district in Madhya Pradesh, as an example. Despite the widespread malnutrition in this area, MDM was expected to have a significant impact on girls' involvement.

Initiated by the Centre for Equity Studies (CES), a field survey was carried out by Jean Dreze and Goyal (2003)⁵. Chhattisgarh, Rajasthan, and Karnataka were the three states where the CES survey was conducted. We casually picked three districts at random from each state, taking into consideration the necessity for a general distribution across various socioeconomic and agroclimatic zones. The same procedure was used to choose three blocks within each district. We used census data to compile a list of communities in each sample block whose populations ranged from 500 to 1500. From that group, three towns were chosen at random. From the months of January through April, the survey was conducted. Included in the field study were in-depth interviews with four houses, the primary school head, a member of the village education committee (VEC), and the meal cook.

The study's most important conclusion was that regular service of the Mid-Day Meals was observed in 76 out of the 81 schools that were part of the sample. Rice deliveries were erratic at one Karnataka school. A cook would get the grains and other ingredients for the Mid-Day Meal from the teacher or sarpanch at each of the sample schools. In Rajasthan, the dish 'Ghoogri' was served daily without variation. Although there is significant variation, a typical Chhattisgarh meal consists of rice and dal, or veggies. Apart from rice and sambhar, Karnataka offered the healthiest and most varied menu over the course of a week. Following the implementation of Mid-Day Meals, the number of students enrolled in school rose. In low-income neighborhoods, where some students went without lunch, the Mid-Day Meal helped put an end to classroom hunger and provided some much-needed nutrition.

Although there were a handful of instances where parents from higher castes openly opposed Mid-Day Meal, the majority of parents from lower castes were skeptical of the program. Some parents from higher social classes sent their children school lunches. Additionally, the recruitment of Dalit chefs was met with considerable opposition from the upper caste. Women made up the vast majority of the sample schools' cooks, at 68%, and the majority of those women were from low-income families. The lunch program does require a lot of time and effort from many educators. At least once every twelve months, around 10% of parents reported that their children had occasional nausea after using MDM. There was no adequate kitchen available in most schools. Until Karnataka made a concerted effort to construct kitchens in all of its elementary schools, food was frequently prepared outside in makeshift sheds or even in the classroom. A lack of cutlery was another prevalent issue among the schools that made up the sample. The water supply was considered "inadequate" by nearly half

of the school principals surveyed. Formal monitoring arrangements were few, and supervision of mid-day meals was informal.

A study was carried out by Sen, A. (2003)6; on the topic of the mid-day meal and its impact on the environment of female students in primary school. The Centre for Equity Studies surveyed 81 schools in three states (Rajasthan, Chhattisgarh, and Karnataka) between January and April 2003. Each sample state has twenty-seven communities chosen at random. The 81 communities were the focus of in-depth interviews with educators, parents, and chefs as part of the field surveys.

School started off on the right foot nationwide, according to the poll, despite some serious quality issues that need immediate action. The report claimed that school instruction, child nutrition, and social fairness may be revolutionized by better Mid-Day Meals. The Mid-Day Meal program received high marks in two areas pertaining to nutrition, according to the poll. Poor women were also able to find work thanks to the system. The quality of the Mid-Day Meal program varied greatly across the nation, according to the investigators. The infrastructure for the supply of Mid-Day Meal has been set up by Karnataka, and excellent progress has been made.

3. METHODOLOGY

One common term for India's school lunch program is the Mid-Day Meal Program. It has its roots in a lengthy line of projects spread out throughout the subcontinent.

According to the Committee on Mid-Day Meals's (1995) report, the program's origins may be traced back to 1925, when a Madras Corporation area program was established to serve low-income children in Tamil Nadu. After that, in 1928, the Keshav Academy of Calcutta instituted a monthly 'Midday Tiffin' that all schoolboys were required to purchase for four annas. In 1941, portions of Kerala began providing school lunches, and in 1942, Bombay instituted a free lunch program. Who gave skim milk powder to kids aged 6–13 with the help of UNICEF? In 1946, another initiative was initiated in Bangalore city, which offered youngsters cooked rice mixed with curd.

The state government of Telangana implemented a plan, which began in 1953 to supply meals that included roasted, sprouted, boiled, or ground-nut puffed rice, potatoes, or seasonal fruits. In the 1950s, with the help of organizations like the WHO, FAO, and UNICEF, a number of states implemented such programs.

Funded by the Government of India, FAO, WHO, and UNICEF, the Expanded Nutrition Program (ENP) was established in 1958–59. According to the Committee on Mid-Day Meals (1995), this was later expanded into the Applied Nutrition Program. For more than ten years, people had debated the possibility of establishing a national mid-day meal program. A program called "Food for Learning" that would use FAO commodities as funding was considered in 1982. The program's intended beneficiaries were females from Scheduled Castes (SC) and Scheduled Tribes (ST). Following discussions among government agencies, the United States Department of Education developed a plan in 1983 in accordance with WFP standards.

The plan was to enroll 13.6 million SC students and 10.09 million ST females in grades I through V in 15 states and 3 union territories where the percentage of SC and ST female students was below 79%. The overall yearly expense for commodity aid came to \$163.27 million. It was supposed that the state governments would cover other expenses like transportation, cooking, and managing the food. The plan was sent out to the various states and union territories, but the responses were varied. Although some states were open to the idea, others were skeptical. Example: Telangana thought it would be impractical to provide Mid-Day Meals exclusively to SC/ST children, and Rajasthan was worried that it wouldn't be able to continue the program if it lost funding from WFP.

People in rural areas were hoping that this program would also aid in feeding the undernourished kids living there. One of the main aspects of the program was the gradual

distribution of food items that provided 300 calories and 12–15 grams of protein to elementary school students.

(ii) A daily budget of 60 paise per child, including administrative costs.

(1) There is no need to establish a complex administrative framework.

(iv) Disbursements designated for the poverty alleviation plan must cover the program's necessary funding.

(v) States need to figure out how to manage logistics and set things up for employees like cooks, helpers, administrators, and monitors.

It was acknowledged that the plan had certain flaws, including the potential for water damage, inadequate facilities, instructors' absence, involvement of children who did not attend school, and abuse by program administrators. Time would hopefully allow for these issues to be resolved. But evidently because of budgetary restraints, the program was not included in the next year's plans.

Covering 994 ICDS blocks with a concentration of SC/ST children at a daily cost of Rs.1/-was proposed by the Department of Education in December 1988. This program's lynchpin was that it would (i) extend to all elementary school students enrolled in public and private institutions.

(ii) On every workday, lunch should be given.

(iii) Care assistance, being excluded if applicable.

(iv) Schools shall be provided with cereals, pulses, edible oils, and condiments by approved state agencies, to the extent practicable.

With varied degrees of coverage, seventeen state governments were implementing the program in 1990–1991. The program was for elementary school students aged 6–11. Thirteen states were contributing to the Mid-Day Meal Program; these included Goa, Gujarat, Kerala, Maharashtra, Meghalaya, Mizoram, Nagaland, Sikkim, Tamil Nadu, Tripura, and Telangana. The program was largely funded by CARE and was partially implemented in three states—Karnataka, Orissa, and West Bengal. Thirteen states and five union territories were managing the Mid-Day Meal program as of December 1994, according to the Ministry of Human Resource and Development.

4. RESULTS

This research aims to examine the patterns and causes behind the Gross Enrollment Ratio (GER) and Net Enrollment Ratio (NER) as they pertain to the educational blocks in Wazedu Mandal, Jayashankar Bhupalpally that are being studied.

IMPACT OF MID-DAY MEAL SCHEME ON PROMOTING ENROLMENT

We go over the study's secondary goal in this section: to determine how the Mid-Day Meal Scheme affected student enrollment in different blocks of the Wazedu Mandal and Jayashankar Bhupalpally districts. To measure the increase in student enrollment after the implementation of the school lunch program, the Compounded Annual Growth Rate (CAGR) was computed. There is no discernible improvement in enrollment at schools that have introduced Mid-Day Meal, according to the Compounded Annual Growth Rate (CAGR) figures shown in table. You may see the overall enrollment position in the primary wing of schools in Wazedu Mandal, Jayashankar Bhupalpally district, in Table.

Table 1 Compounded Annual Growth Rate to assess the Impact of Mid-day Meal in Promoting Enrolment in government Primary Schools in Wazedu Mandal, Jayashankar Bhupalpally

Class ⇨ Year ⇩	Class I	Class II	Class III	Class IV	Class V	Total
2011-12	67782	63942	62097	54552	49049	297442
2012-13	70188	69351	64057	58429	51749	313774
2013-14	75074	72118	67866	60111	54275	329444

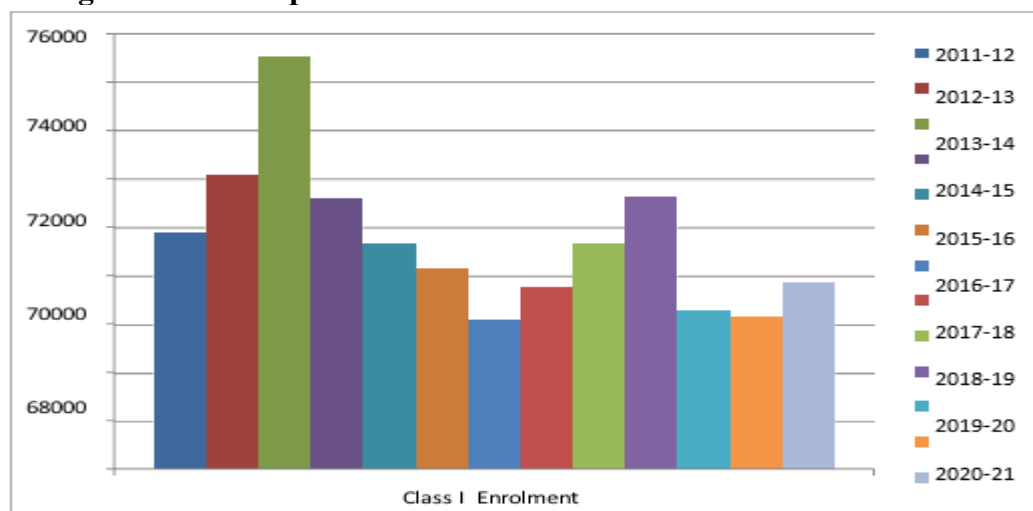
2014-15	69218	69668	65336	60039	53490	317751
2015-16	67322	68042	66553	60183	55751	317851
2017-18	64220	66745	64714	62794	59021	317494
2018-19	65543	70041	70871	66359	65742	338556
2019-20	67352	69084	70638	69592	65244	341910
2020-21	69301	68608	68593	66842	66169	339513
2021-22	64553	64446	68112	66351	65920	329382
2022-23	64287	61896	65437	65950	64478	322048
2023-24	65759	63032	64366	65138	67106	325401
CAGR (%)	-0.23	-0.11	+0.28	+1.37	+2.44	+0.69

For example, in table, From 2011–2012 to 2023–24, the CAGR for the main wing, which includes classes I–V, was positive at 0.69. During the same time period, the CAGR for class I is -0.23, while for class II it is -0.11. On the other hand, CAGR is positive for classes III, IV, and V, coming in at +0.28, +1.37, and +2.44 correspondingly. An intriguing observation to make is that the CAGR is rising, indicating a good tendency, as the class increases. The overall growth rate for elementary school kids in the Jayashankar Bhupalpally district's Wazedu Mandal has climbed by 0.69 percent.

Parents' inclination to send their children to private schools is the primary factor contributing to the drop in enrollment in public schools. Despite a general uptick in the literacy rate among the upper classes, enrollment in public and publicly-funded institutions has remained stagnant. So, it's safe to say that primary school enrollment in Wazedu Mandal, Jayashankar Bhupalpally, surged right after the Mid-Day Meal plan was introduced. However, as time went on, both children and parents lost interest in the program.

For classes I through V, bar graphs have been used to provide a clear view of enrollment.

Figure 1 Bar Graph of Total Enrolment of class I from 2011-12 to 2023-24

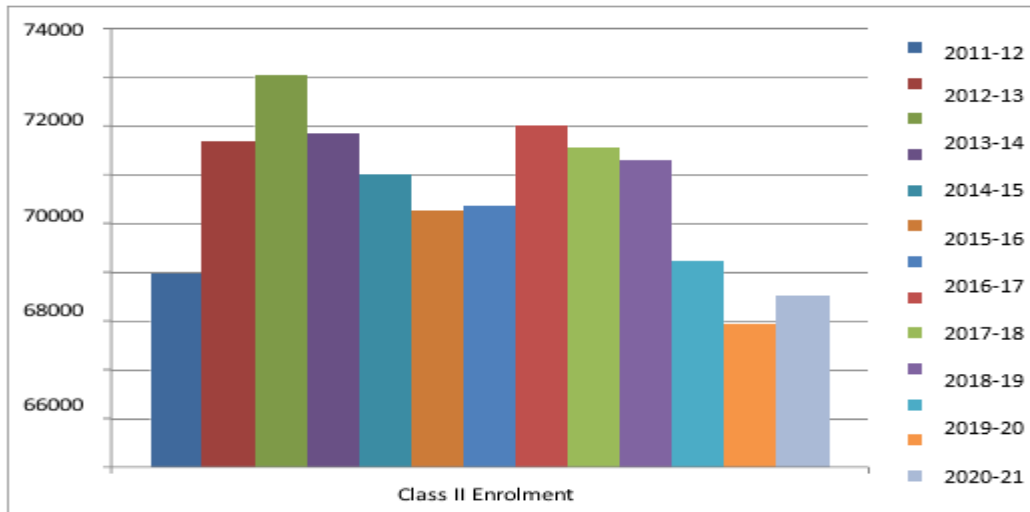


The data in table show that the number of students enrolled in grade I increased from 67782 in 2011–12 to 75074 in 2006–07. Class I enrollment at government elementary schools in Wazedu Mandal, Jayashankar Bhupalpally included, after the September 2004 implementation of Telangana's Mid-Day Meal Scheme increased. The enrollment trend has been downward since 2016–17, with the exception of 2011–12, 2012–13, 2013–14, and 2023–24, which show a little uptick compared to prior years.

The most significant spike in enrollment occurred in 2016–17, as shown in bar graph, and after that, a zigzag pattern in first-grade enrollment was seen.

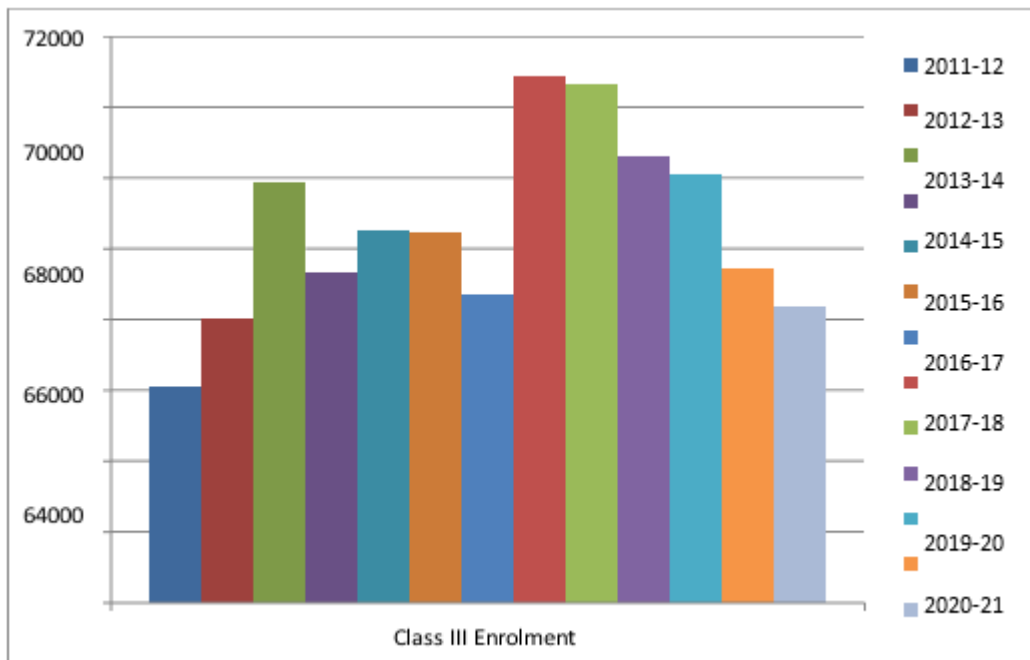
Figure 2 Bar Graph of Total Enrolment of class II from 2011-12 to 2023-

24



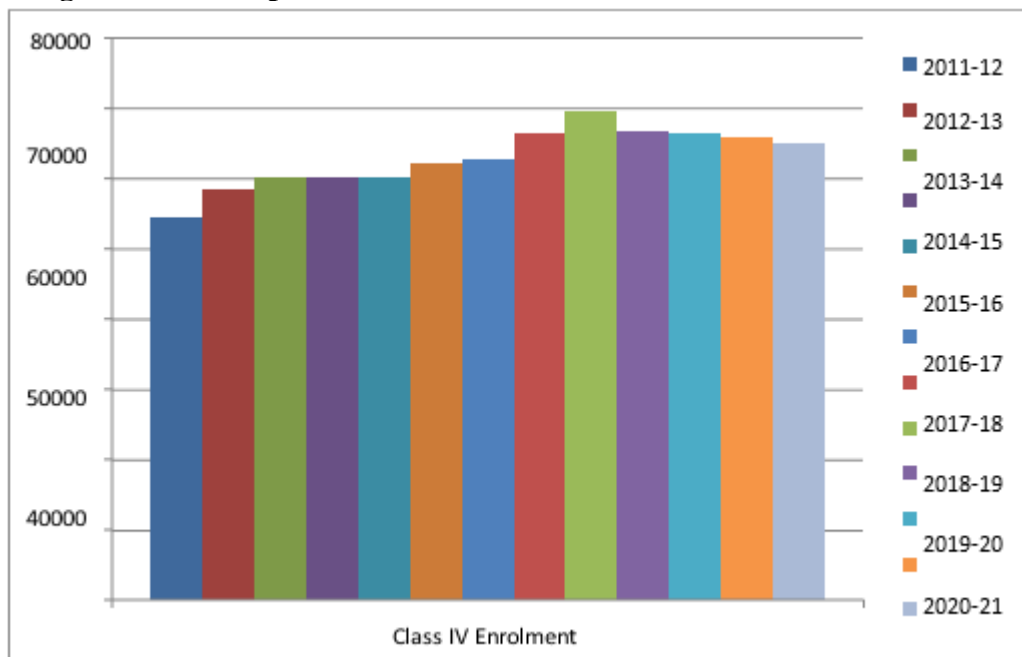
After 2016-17 there has been a declining trend in the enrolment in class II excepting the years 2010-11, 2011-12 and 2023-24 showing a marginal increase in enrolment over previous years. Bar graph show the highest increase in enrolment in 2016-17 and thereafter a zig-zag trend in the enrolment in class II has been found.

Figure 3 Bar Graph of Total Enrolment of class III from 2011-12 to 2023-24



Third grade at the public elementary schools in Wazedu Mandal and Jayashankar Bhupalpally from 2011–12 to 2016–17. The enrollment range was 6,297 to 6,786, respectively. With the exception of 2010–2011, class III enrollment has been steadily dropping since 2016–17. Class III enrollment peaked in 2011–2012 (as seen in bar graph), and since then, it has been steadily dropping.

Figure 4 Bar Graph of Total Enrolment of class IV from 2011-12 to 2023-24



Thereafter from 2012-13 there has been a continuously increasing trend in the enrolment in class IV and after 2013-14 enrolment is showing a declining trend.

Bar graph show the highest increase in enrolment in 2012-13 and thereafter a declining trend in the enrolment in class IV has been found.

From 2017-18 to 2023-24 there has been a continuously increasing trend in the enrolment in class V excepting the years 2012-13, 2014-15 and 2015-16.

Bar graph show the highest increase in enrolment in 2023-24 and almost a continuously increasing trend line for class V.

5. CONCLUSION

In order to combat childhood obesity, increase enrolment in schools, and foster regular attendance among children, especially in economically deprived and rural regions, the Indian government launched the Mid-Day Meal Scheme (MDMS). In this study, the researchers in Telangana set out to determine how the MDMS affected the growth of elementary school students in the Wazedu mandal of the Jayashankar Bhupalpally district.

The research emphasizes the multi-faceted function of MDMS as an incentive for education and a dietary program. The study's stated goals were to determine if the program was successful in raising students' mental and physical health, increasing their likelihood of showing up to class regularly, and boosting their grades. The results indicate that the MDMS has had a beneficial effect on the focus, conduct, and engagement of the pupils. The capacity of youngsters to actively participate in their studies was enhanced and the number of distractions caused by hunger was decreased when healthy meals were provided on a regular basis.

Inadequate infrastructure for lunch preparation and delivery, uneven food quality, and logistical issues were among the concerns highlighted by the research as affecting Wazedu schools. There are still some implementation gaps that need to be filled in order to fully realize the scheme's potential for improving children's development, but overall, it has been rather successful.

Based on these findings, the MDMS may be an effective means of helping rural Indians close the achievement gap in areas like nutrition and schooling. The MDMS has been an essential intervention in Wazedu mandal to increase school attendance and decrease dropout rates, a region where economic and social issues make it difficult to obtain education. Parents are

more likely to take their kids to school if they know they'll have a healthy lunch there every day, according to the research. Gender equality in school has benefited greatly from this, since it has increased the enrollment of females.

Getting kids to eat at regular intervals enhanced their focus, memory, and participation in class, thus it was clear the strategy was helping with cognitive growth. Increased engagement in both academics and extracurricular activities was one of the good behavioral improvements noted by teachers. The scheme's capacity to give a feeling of security and well-being, in addition to improved nutrition, is associated with these changes.

On the other hand, the research did find a few problems with the MDMS that were hindering its successful adoption. There is a lack of adequate kitchen facilities and problems with the timely delivery of food supplies to schools in rural locations. There has to be a step up in quality control and monitoring to make sure the food is consistent and safe. Furthermore, the viability of the plan is affected by the minimal community engagement in its administration in some locations.

REFERENCES

1. Panigrahi, L. (1999). *Achievement motivation and attitude towards school and school subjects as factor in academic achievement of secondary school students*. M. Phil. Dr. M.P. Institute of Advanced Studies in Education, Sambalpur.
2. NCERT (1979), 'A Study of Administration of Elementary Education in Relation to UEE in Some States', Buch, M.B. (ed.), *Third Survey of Research in Education*.
3. Seetharaman, A.S. (1980), 'Utilisation of Educational Facilities by Slum Dwellers of Bangalore City in Relation to their Socio-Economic Background', Buch, M.B. (ed.) *Third Survey of Research in Education (1978-83)*, March 1987.
4. Sinha, A. (1998), *Primary Schooling in India*, Vikas Publishing House Pvt. Ltd., New Delhi.
5. Dreze, J. and Goyal, A. (2003), 'The Future of Mid-Day Meals' In *Economic and Political Weekly*, Vol 38, No. 44, November 1st.
6. Sen, A. (2003); *Mid-Day Meal Responsible for Leap in Female Environment in Primary School*.
7. Afridi, F. (2005). 'Midday Meals in Two States - Comparing the Financial and Institutional Organisation of the Programme' *Economic and Political Weekly*, April, 9th 1528-1534.
8. Deodhar, S., & al, e. (2006). *Mid-Day Meal Scheme: Identification of Critical Issues*. St. Xavire's College, Ahmedabad.
9. Dreze, J. (2006). *Mid-day Meal and Joy of Learning*. Research work.
10. Godavaridharan, V. A. (2006). *Noon Meal Scheme in Kerala*. Research work.
11. Robinson, N. (2007). *A Report on the Implementation of the Mid-day Meal Scheme in Four District of Madhya Pradesh*.
12. Srinivas, K. (2008), "A Study of Best Practices in the implementation of Mid - Day Meal Programme in Karnataka". NIJEPA, New Delhi, November 2008.
13. Narula M. (2009), "National Programme of Nutritional support in Government Primary and Upper Primary Schools: A case study of Jharkhand". Department of Educational Administration, NUEPA, New Delhi.
14. Programme Evaluation Organization. (2010). *Performance Evaluation of Cooked Mid-day Meal*. PEO Report No. 202. Planning Commission, Government of India, New Delhi.
15. Singh, A. e. (2012). *School Meals as a Safety Net: An Evaluation of the Mid-Day Meal Scheme in India*. Research work.