

MID DAY MEAL (MDM) PROGRAMME IN WEST BENGAL: A STUDY

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ABSTRACT

Mid Day Meal (MDM) is a well-known name for school meal programme, it provides free lunch on working days for the children of primary and upper primary classes. In this study, we try to assess the Nature and impact of MDM on Enrollment, and academic achievement of student in four selected upper primary schools of Howrah District in West Bengal. The study based on both primary and secondary data. The secondary data collected from various reputed government and other web sites, and for the collection of Primary Data, we select four schools of Howrah district and head Teacher and office Authorities provide data for this study. The result of field study reveals that MDM plays a significant role in the development of enrollment of student and academic achievement of student in this school.

KEYWORDS: *Mid Day Meal, Enrollment, Academic Achievement, Teachers, and Students*

INTRODUCTION

Midday meal is a school meal programme designed by the government of India. It is designed for improving the nutritional status of school goers, children and It involves the provision of free lunch on working days for the children in primary and upper primary classes with a view to improving universalisation of primary education by improving enrollment, attendance, retention and learning level of children, especially those belonging to disadvantaged sections of society. The cooked midday meal programme started in West Bengal in January 2003 with 1100 schools of 5 district (Murshidabad, Birbhum, Bankura, Paschim Mednipur and Jalpaguri), thereafter coverage of schools increased gradually.

Research Methodology

The present paper is mainly based on secondary data and data have been collected from various books, journals, research articles, newspapers, magazines, reports. Various reputed web sites also has been used to collect the various up to date data. After taking into account different aspects of the study a descriptive research design is adopted to make the research more accurate.

Brief About Mid Day Meal Programme

The midday meal is not a new concept, it has a long history. In 1925 midday meal programme introduced for disadvantaged children in the Madras Municipal Corporation. In the mid 1980s three states viz, Gujrat, Kerala, and Tamil Nadu universalized a cooked mid-day meal with their own resources for children studying in primary classes and by 1990-91 the number of implementing mid-day meal programme with their own resources had increased to 12 states with

the intention of enhancing enrollment, retention and improving the nutritional level among children. The National Programme of Nutritional Support to Primary Education (NPNSPE) was launched as a centrally sponsored scheme on 15th August 1955 start with 2408 blocks in the country. In 1997-98 the NPNSPE was introduced in all blocks of the country. It was further extended in the year of 2002 to cover not only in primary classes in Government, Government aided and Local body school, but also children studying in EGS and AIE centers and central assistance under the scheme consisted free supply of food grains at 100gms per child per day.

In September 2004 the scheme was revised to provide cooked mid-day meal with 300 calories and 8-12 grams protein to all children who studying in class 1-V in government and government-aided school and EGS\AIE centers. The revised scheme provides Central assistance for:

- Cooking cost at Rs 1 per child per school day.
- Transport subsidy was raised from an earlier maximum of Rs. 50 per quintal to Rs. 100 for special category states and Rs 75 per quintal for other states.
- Management, monitoring and evaluations cost at 2% of the cost of food grains, transport subsidy, and cooking assistance.
- Provision for the midday meal programme during summer vacation in drought-affected areas.

In the month of July 2006 the scheme was again revised for providing:

- Cooking cost of Rs 1.80 per child per school day for the state in North Eastern region, provided the NER states contribute RS 0.20 per child per school day.
- Rs 1.50 per child per school day for other states and UTs provided that these states and UTs contribute RS 0.50 per child per school.

In October 2007 the scheme was again revised and to cover students in upper primary classes VI to VIII initially in 3479 educationally backward blocks (EBBS) around 17 crore upper primary children.

From the year 2008-09 i.e 1st April 2008 the scheme cover all children studying in Governmental, Local Body and Governmental Aided primary and upper primary Schools and the EGS/AIE centers including Madras and Maqtabs supported under SSA of all the areas across the country. The calorie value of the midday meal upper primary stage has been fixed at a minimum of 700 calories and 20 grams protein by providing 150 grams of food grains (Rice, Wheat) per child per school day. In the year 2009, the following have been made to improve the implementation scheme:

- Food norms have been revised to ensure a balanced and nutritious diet to children of the upper primary group by increasing the quantity of pulses from 25 to 30 grams, vegetables from 65 to 75 grams and by decreasing the quantity of oil and fat from 10 grams to 7.5 grams.

- Cooking cost (excluding the labour and administrative charges) has been revised from Rs. 1.68 to RS 2.50 for primary and for upper primary children from Rs 2.20 to Rs 3.75 from 01.12. 2009 to facilitate serving the meal to eligible children in prescribed quantity and of good quality. The cooking cost of a primary is Rs 2.69 per child per day and Rs 4.03 for upper primary children from 1.4.2010. the cooking cost will be revised by 7.5 % from 1.4.2011
- The honorarium for cook and helper from the labour and other administrative charges of Rs 0.40 per child per day provided under the cooking cost. In many cases, the honorarium was so little that it became very difficult to engage manpower for cooking the meal. For this reason, a separate component for payment of honorarium at Rs 1000 per month per cook cum helper was introduced from 01. 12 2009, honorarium at the above-prescribed rate is being paid to cook cum helper.

Norms for the engagement of cook cum helper have been made.

- One cook cum helper for school up to 25 students.
- Two cook cum helper for school with 26 to 100 students.
- One additional cook cum helper for every addition of up to 100 student

With effect from 1.07.16 for 2016-17 and over the cooking cost will be shared between the Centre and the State in the ratio of 60:40 for non-NER States. 100% for UTs and 90:10 for NER states and 3 Himalayan states viz, Himachal Pradesh, Jammu & Kashmir and the Uttarakhand. The rates of cooking cost for Primary and upper primary classes would be as under:

Table 1

Stage	Cooking Cost Per Child Per Day	60:40 non NER States		90:10 NER and 3 Himalayan States		100% for UT
Primary	Rs. 4.13	Rs. 2.48	Rs.1.65	Rs.3.72	Rs.0.41	Rs. 4.13
Upper primary	Rs. 6.18	Rs.3.71	Rs.2.47	Rs.5.56	Rs.o.62	Rs.6.18

Weekly Menu – Day wise

In spite of the fact that the cooking cost per children is not sufficient compared to the present market value, the authority has prepared a general menu chart for the schools, considering all the parameters of the desired nutrition level to be provided to the children. The sample of menu chart is given hereunder:-

Table 2

Day	Suggestive menu
Monday	Rice + Dal + Soyabean Curry
Tuesday	Khichadi with leafy vegetables
Wednesday	Rice + Egg curry
Thursday	Rice + Soyabean curry +Dal
Friday	Rice + Dal +Mixed vegetables
Saturday	Rice + Egg curry + Mixed vegetables

In Kolkata, two eggs are served in a week. Meat, fish or any kind of fruits are served to the MDM takers in some districts like Murshidabad, North 24 Parganas, and Nadia. The head of the institution and the local people, sometimes, provide additional food items.

During 2016-17 (up to December 2016) the programme has covered cent percent of Govt. (including the local body), Govt. aided schools, and EGS/AIE centers with 71,17,405 students from class I-V of 67,648 Primary Schools and 48,20,977 students of class VI-VIII of 16,159 Upper Primary schools in the **state**.

As per the report of “ About the Mid-Day Meal Scheme-, retrieved from mdm.nic.in on 28 July, 2013” MDMP serving 120,000,000 children in over 1,265,000 schools and Education Guarantee Scheme centers in the **country** and it is the largest such programme in the world.

Mid Day Meal (Amendment) Rules 2017

Mid Day Meal guidelines, 2006 and 2015 provides for setting up of centralized kitchens for a cluster of school in urban areas where there is a space constraint for construction of kitchens in individual schools. As per this report at present 72 lakh children studying in 42,383 schools through centralized kitchens.

As per this amendment the Civil Society Organization (CSO) or Non-Govt. Organization (NGO) may be engaged for the supply of hot cooked meal under MDMS for a cluster of schools in urban areas or in identified rural areas which have good road connectivity, for the purpose of leveraging efficiency gain. The Act imposes the following responsibilities on the CSO/NGO:

- The CSO/NGO shall ensure that the premises should be clean, adequate lighted and ventilated and have sufficient free space for movement. The premises should be kept free from all insects. No spraying should be done during the cooking of mid-day meal, but instead, fly swats/ flaps should be used to prevent flies getting into the premises. Windows, doors and other openings should be fitted with net or screen as appropriate to make the premises insect free.
- Only packed dals, salt, spices, condiments and oil with AG-MARK/ FSSAI quality symbol should be used for cooking mid-day meal.
- The CSO/NGO shall keep the food grains and other materials in hygienic conditions, free of pets, insects, fungus etc;
- Drinking water should be tested for its portability as per the schedule decided by the States/ UTs.
- CSO/NGO shall also ensure that Cook-Cum–Helper (CCH) working at centralized kitchens is free from any disease, particularly contagious diseases. CSO/NGO shall arrange medical check-up of them at least once in six months. It also requires to ensure that CCH is (Which provided by CSO/NGO) using Aprons, Head-gears and gloves during cooking of mid-day meal.
- CSO/NGO should supply the cooked meal in good quality sealed insulated/ stainless steel containers. A temperature of the mid-day meal when served should maintain at or above 65⁰C.

- The CSO/NGO should ensure that the cooked meal is transported and delivered at the school under the supervision of an authorized person.
- Cooked mid-day meal is fit for human consumption for four hours after cooking and it should be transported to schools and consumed by children within the time.
- In case the State has the provision of egg/milk/ fruit in the menu and the CSO/NGO is not willing to provide the same, the state should make alternative arrangements to supply egg/milk/fruits as prescribed in the menu.
- CSO/NGO should have adequate fire safety measure in the centralized kitchen.

REVIEW OF RELATED LITERATURE

Deodhar satish and others (2010) –They observed in their study that Midday Meal is a very effective means of promoting enrollment, school attendance, and retention. It has also short-term effect like better attention, memory and learning and it also brings better social integration.

Paul and mondal (2012)- They stated in their study that the different factors like Enrollment of student attendance, Retention, Dropout has a positive impact in achieving of higher level of performance of student particularly belonging to BPL (Below Poverty Level) of student who residing in rural areas of upper primary level of Burdwan district.

Hamid yawar and Hamid Asmat (2012)- They reported different types of defect in Midday Meal Programme, like a socioeconomic, cultural, and administrative problem. They also reported that General caste student not receives midday Meals with Reserved caste (SC, ST, OBC) on account of their social status.

Uma (2013)- In her study she observed that the quality of Midday Meal is not up to the mark, she also mentions that proper care is not taken in preparing food, but on the other hand it also able to realizing its objective like improvement of enrollment, nutritional status and in reduction of dropout rate.

OBJECTIVE OF STUDY

- The first objective is to know the effect of MDM programme on enrollment of the student in Schools.
- The second objective is to know the effect of MDM programme on academic achievement of the student.

Hypothesis of Study

The null hypotheses are the following.

Ho1: There is no significant relationship exist between MDM programme and enrollment of students in schools.

Ho2: There is no significant relationship exist between MDM programme and on the academic achievement of students.

Methodology of the Study

This study is based on both primary and secondary data. The primary data collected by the field study. The field survey was based on the observation of four schools of Howrah in West Bengal. The primary data were collected by using interview and focus group discussion with school management committee members, parents, students and

teachers are also involved in focus group discussion. School data on enrollment and, attendance was collected from headmaster (HeadMistress). The secondary data collected from the different reputed governmental website. Simple statistical calculations have been used in data analysis.

Field Survey (Primary Data Analysis)

Table 3: Shibpur Bhavani Girls School

Sl No	Year	Enrollment	Number of Student Got MDM	% of Students Get MDM	% of Increase/Decrease in MDM	% of Increase/Decrease in Enrollment
1	2011-12	500	393	78.60%	-----	----
2	2012-13	483	400	82.82%	1.78%	-- 3.40%
3	2013-14	563	510	90.58%	27.50%	16.56%
4	2014 -15	580	501	86.37%	1.76%	3.01%
	Average	531.5	451	84.59 %	10.35 %	5.39 %

Table 4: Shibpur Dinabondhu Institution

Sl No.	Year	Enrollment	Number of Student Got MDM	% of Students Get MDM	% of Increase/Decrease in MDM	% of Increase/Decrease in Enrollment
1	2011-12	273	216	79.12 %	-----	-----
2	2012-13	313	290	92.65 %	34.26%	14.65 %
3	2013-14	345	295	85.50 %	1.73%	10.22 %
4	2014 15	370	325	87.84 %	10.16%	7.24 %
	Average	325.25	281.5	86.28%	15.38%	10.70%

Table 5: Shibpur Chatterjeehut Girls School

Sl.No.	Year	Enrollment	Number of Student Got MDM	% of Students Get MDM	% of Increase/Decrease In MDM	% of Increase/Decrease in Enrollment
1	2011-12	210	170	80.95 %		
2	2012-13	190	125	65.78 %	-26.47 %	-- 9.52%
3	2013-14	240	180	75.00 %	44.00%	26.32%
4	2014 -15	183	110	60.11 %	-38.88 %	-- 23.75%
	Average	205.75	146.25	70.46%	-- 7.12%	-- 2.22%

Table 6: Shibpur Ramkrishna Vidyalaya

Sl No.	Year	Enrollment	Number of Student got MDM	% of Students get MDM	% of increase/decrease in MDM	% of increase/decrease in Enrollment
1	2011-12	383	330	86.17 %	---	---
2	2012-13	405	380	93.83 %	15.15 %	05.74 %
3	2013-14	463	400	86.39 %	05.26 %	14.32 %
4	2014-15	413	390	94.43 %	--02.560%	-- 10.79 %
	Average	416	375	90.21	5.95 %	3.09 %

Table 7: Relationship between Enrollment & MDM Programme

Sl No.	Schools	Year	Average % of Increase/Decrease in MDM	Average % of Increase/Decrease in Enrollment
1	Shibpur Bhavani Girls School	2011-12	10.35 %	5.39 %
2	Shibpur Dinabondhu Institution	2012-13	15.38%	10.70%
3	Shibpur Chatterjeehut Girls School	2013-14	-- 7.12%	-- 2.22%
4	Shibpur Ramkrishna vidyalaya	2014-15	5.95 %	3.09 %
	Grand Average		6.14%	4.24%

(The Correlation between MDP and Enrollment is 0.971 which indicate that both are highly Correlated)

Attendance Record

Table 8: Attendance of Students of Shibpur Bhavani Girls School (Out of 180 Days)

Sl. No	Year	Attendance	Increase/Decrease in Attendance
1	2011-12	96	--
2	2012-13	97	1.04%
3	2013-14	100	3.09%
4	2014 -15	115	15.00%
Average		102	6.38%

Table 9: Attendance of Student of Shibpur Dinabondhu Institution (Out of 180 Days)

Sl. No	Year	Attendance	Increase/Decrease in Attendance
1	2011-2012	86	---
2	2012-2013	89	3.49 %
3	2013-2014	94	5.62 %
4	2014 -2015	98	4.26 %
Average		91.75	4.46%

Table 10: Attendance of Student of Shibpur Chatterjeehut Girls School (Out of 180 Days)

Sl. No	Year	Attendance	Increase/Decrease in Attendance
1	2011-2012	121	---
2	2012-2013	111	--8.26%
3	2013-2014	119	7.20%
4	2014 -2015	120	0.84%
Average		117.75	-- 0.22%

Table 11: Attendance of Student of Shibpur Ramkrishna Vidyalaya (Out of 180 Days)

Sl. No	Year	Attendance	Increase/Decrease in Attendance
1	2011-2012	130	---
2	2012-2013	137	5.38%
3	2013-2014	143	4.38%
4	2014 -2015	145	1.40%
Average		138.75	3.72%

Table 12: Relationship between MDM Programme & Academic Achievement of Students (In Terms of Attendance of Students)

Sl No.	Schools	Year	Average % of Increase/Decrease in MDP	Average % of Increase/Decrease in Attendance
1	Shibpur Bhavani Girls School	2011-12	10.35 %	6.38%
2	Shibpur Dinabondhu Institution	2012-13	15.38%	4.46%
3	Shibpur Chatterjeehut Girls School	2013-14	-- 7.12%	-- 0.22%
4	Shibpur Ramkrishna Vidyalaya	2014-15	5.95 %	3.72%
Grand Average			6.14%	3.59%

(The Correlation between MDP and attendance at school is 0.971 which indicate that they are highly correlated)

RESULT AND DISCUSSIONS

- The enrollment of Shibpur Bhavani Girls School was in increasing trend but slightly decrease in 2012 -13 but it gradually increase in subsequent years. However in case of the number of students got Mid Day Meal increases year after year and slightly decrease in 2014 -15 and about the attendance of student was good.
- The enrollment of Shibpur Dinabandhu Institution is gradually increased and the number of students got Mid Day Meal satisfactorily increase and attendance of student also improved.
- The enrollment of student of Chatterjee Hut Girls school is not good and the number of students receive Mid-day meal is lower in comparison of earlier years except the year 2013-14, and the attendance of student decrease in 2012 -13.
- The enrollment of student of Ramkrishna Vidyalaya is good but the number of students receive Mid Day Meal is very lower in 2014 -15 but the student attendance is very good.

Testing of Hypothesis

Hypothesis 01: From the Table No-05 it is clear that there is strong relationship exists between Enrollment of students and MDM Programme. The correlation between these two variables is 0.971. The average relationship is also in same directions. So there is a high relation between enrollments and MDM programme. Based on this analysis we can reject the Hypothesis -01 and can conclude that there is significant relationships exist between MDM programme and enrollment of students in school.

Hypothesis 02: From the Table No-10 it is observed that MDM Programme and Attendance of students in the school is also in the same direction. The correlation between these two variables is 0.884. Average relationship is also in the same direction. So obviously there exists a strong relationship between MDM programme and attendance of students. Based on this analysis we can discard the Hypothesis-02 and can conclude that there is significant relation exist between MDM programme and attendance of students in school.

Impact of the MDM Programme in School

The teachers of the schools interviewed claimed that the school meals had an effect on the school attendance. The teacher in three schools said that the mid-day meals scheme not only boosted daily attendance of students, but also helped to keep them in class for the duration of the school day. The teachers said that student attendance had increased noticeably following the introduction of the mid-day meals because "the meals we provided here were so much better than what the children were getting at home." One teacher told us that some of the students were also attending the school just for having mid-day meals and returned home after having them. Teachers in all schools said that the children's academic performance had improved because they no longer got hungry during the school day. The government is continuing to increase both the funding and the quality requirements for the Mid-Day Meals Scheme. The appointment of cooks has ensured that the preparation of the mid-day meal does not interfere with classroom activity. The study found that cooked mid-day meals have become part of the daily routine of the schools. Cooks had been hired in most schools and the meals did not seem to greatly disrupt classroom activities. Several teachers also credited the mid-day meals with putting an end to classroom hunger and thus improving the students' academic performance. Many teachers believed that the meal

programme was responsible for increasing enrolment and attendance at their schools, though most of them explained that the meals mainly attracted younger children. The school meals had boosted the enrolment and attendance of the youngest primary school children

Advantage of Mid Day Meal Programme

- The first advantage of midday meal programme is the enhancement of student's strength in school.
- The second advantage of this programme is that it provides benefit to economically weaker strata of the society.
- The third advantage of this programme is that it's lowering the drop out percentage in our schools. As per DISE report, in the year 2009-10 average dropout rates was 4.94% and 7.22%, in primary and upper primary schools respectively, while in 2010-11 the dropout rate has become 4.45% and 5.41% in primary and upper primary schools respectively,
- The fourth advantage of this programme is that it reduces hunger in a child by providing one-time food to the child, in this way it also tackles the problem of malnutrition in the child.
- The fifth advantage of this programme is that it is the boon to the students of drought-affected areas especially during summer time as it provides nutritional support to children of the elementary stage.
- The sixth advantage is that, it also increases gender empowerment by increasing the employment opportunities in rural women. In our state women constitute approximately 93% of person who have been engaged in Mid day meal cooking purpose out of total 257118 number cum helper.
- The seventh advantage of the programme is that it has been instrumental in the inflow of more than 1000 crores of rupees in our economy by the way of infrastructures creation, purchase of cooking materials, cost of food grains, honorarium to cook cum helper, and ancillary activities related with midday meal programme inflow of such a huge amount of fund in the implementation of mid-day meal has a direct impact on socio-economic aspect of our society.

Major Drawback of Mid Day Meal Programme

- The first disadvantage of this programme is the erratic and inadequate supply of LPG gas connection.
- The second disadvantage of this programme is the insufficient construction of pucca kitchen, construction of hygienic pucca kitchen cum store is very important for the preparation of safe and hygienic midday meal. We are yet to construct such sheds in all schools. In some cases, the earlier ceiling of Rs 60,000 unit cost per kitchen cum store shed stood as a major problem due to the escalation of price.
- The third disadvantages are lack of adequate cost, cost of kitchen devices per school still remain at Rs. 5,000 per school is quite insufficient which cause the problem during implementation at the school level.
- The fourth disadvantage is the implementation of MDM in cosmopolitan areas like Kolkata, Asansol, Siliguri etc still remain the challenge.

- The fifth disadvantage is lack of community participation and staff shortage, but this problem can be overcome through spreading of awareness with the help media campaign.

CONCLUSIONS

From the above discussion, it is clear that MDM programme is very crucial programme undertaken by Government of India for universalization of primary education. In our study, we observe that it play a very effective role in increasing enrollment and attendance of students. The teacher's opinion about the attendance is more or less satisfactory but they are not happy with the improvement of new enrollment, the headmaster of these school also stated that in comparison to earlier few years enrollment, current enrollment is not good, but it may be related with other reason. Overall study reveals that this programme plays an effective role in the improvement of enrollment and attendance of the students. According to study MDM programme also help in the improvement of health and nutritional level of students besides this Mid-Day meal, Government also provide iron tablet to the students for minimizing the iron deficiency. So overall we can say that this is an inevitable programme, that not only help in improvement of enrollment but also improve nutrition level of student, help in better study, reducing dropout etc. So this need to be continuing in future and also like this type of programme need to initiated by the government.

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