

Evaluative Study of Mid Day Meal Scheme in Punjab

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Abstract

The purpose of the study is to examine the execution of Mid Day Meal Scheme in three districts of Punjab i.e. Bathinda, Muktsar, and SAS Nagar by means of questionnaire and interview schedule from a sample of 40 Govt. schools in each district (20 Primary and 20 Upper Primary schools); from students; parents and teachers of these selected schools. The main findings indicate that all students were having mid day meal regularly on every day at lunch time. Regarding quality and menu for MDM served 72% of the interviewed students; and 76% of the interviewed parents were satisfied. The findings of the study also indicated that there was no discrimination due to gender or caste, while having or distributing MDM. Delay in release of funds of cooking cost and remuneration of cook cum helpers was the major problem to run the scheme. The supply of cooking fuel i.e. LPG at the school premises needs special attention from the state level authorities. Initiatives need to be taken for more participation of parents in supervision of MDM cooking.

KEYWORDS: Mid Day Meal (MDM), Mid Day Meal Scheme (MDMS).

1.0. Introduction:

The Mid Day Meal Scheme is a multi-faceted programme of the Government of India that, seeks to address issues of food security, lack of nutrition and access to education on nation scale. It involves provision for free lunch on working days for children in Primary and Upper Primary Classes in Government, Government Aided, Local Body, Special Training Centres, Madarsa and Maqtabas supported under Sarva Shiksha Abhiyan and National Child Labour Project (NCLP) Schools run by Ministry of Labour. The primary objective of the scheme is to provide hot cooked meal to children of primary and upper primary classes with other objectives of improving nutritional status of children, encouraging poor children, belonging to disadvantaged sections, to attend school more regularly and help them concentrate on classroom activities, thereby increasing the enrolment, retention and attendance rates. According to the government, it is the world's largest school feeding programme, reaching out to about 120,000,000 children in over 1,265,000 schools and special training centres (STC's) centres across the country (<http://mdm.nic.in/>).

Mid Day Meal in schools has had a long history in India. In 1925, a Mid Day Meal Programme was introduced for disadvantaged children in Madras Municipal Corporation. By the mid 1980s three States viz. Gujarat, Kerala and Tamil Nadu and the UT of Pondicherry had universalized a cooked Mid Day Meal Programme with their own resources for children studying at the primary stage. By 1990-91 the number of States implementing the mid day meal programme with their own resources on a universal or a large scale had increased to twelve states.

With a view to enhance enrolment, retention and attendance and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched as a Centrally Sponsored Scheme on 15th August 1995, initially in 2408 blocks in the country. By the year 1997-98 the NP-NSPE was introduced in all blocks of the country. It was further extended in 2002 to cover not only children in classes I -V of Government, Government aided and local body schools, but also children studying in EGS (Education Guarantee Scheme) / AIE (Alternative Institutes of Education) centres. Central Assistance under the scheme consisted of free supply of food grains @ 100 grams per child per school day, and subsidy for transportation of food grains up to a maximum of Rs 50 per quintal.

In September 2004 the scheme was revised to provide cooked mid day meal with 300 calories and 8-12 grams of protein to all children studying in classes I – V in Government and aided schools and EGS/ AIE centres with Central Govt. Assistance for cooking cost; transport subsidy of food grains; and management, monitoring and evaluation costs @ 2% of the cost of food grains. In July 2006 the scheme was further revised to provide assistance for cooking cost at the higher rates.

The major change is done in October 2007, as the scheme has been revised to cover children in upper primary (classes VI to VIII) initially in 3479 Educationally Backwards Blocks (EBBs). Around 1.7 crore upper primary children were included by this expansion of the scheme. From 1st April, 2008, the programme covers all children studying in Government, Local Body and Government-aided primary and upper primary schools and the EGS/AIE centres including Madarsa and Maqtabs supported under SSA of all areas across the country.

During the year 2009, food norms have been revised to ensure balanced and nutritious diet to children of upper primary group by increasing the quantity of pulses, vegetables and by decreasing the quantity of oil and fat in food. The cooking cost was revised in 2010-11 1.and again revised for 2011-12 by 7.5%. Honorarium @ Rs.1000 per month per cook- cum-helper was introduced from 1.12.2009 and norms for engagement of cook-cum-helper have been made as per the strength of students. A common unit cost of construction of kitchen shed cum store in all schools for the whole country is provided on the basis of plinth area norm and State Schedule of Rates. A total of 11.77 cr children including 8.41 cr Primary children and 3.36 cr Upper Primary children were estimated to be benefited from MDM Scheme during 2009-10. During 2010-11, about 11.36 Cr children i.e 7.97 Cr. children in primary and 3.39 Cr. children in upper primary are covered in 12.63 lakhs institutions (<http://mdm.nic.in/>).

1.1. Mid Day Meal Scheme in Punjab:

In Punjab, the hot cooked meal is served to the students in the lunch hour prepared in the school premises except in two districts i.e. Ferozepur and SBS Nagar, where the cooked food is served by the centralised kitchens. The menu is decided at the state level for all the six days of a week and schools consider that menu. Currently Mid-Day-Meal Programme covers 22.23 lacs children in Government, Government Aided schools, Special training centres in 15567 Institutions (Classes I-V) and 5823 Government and Government Aided Schools (Classes VI-VIII) (<http://www.ssapunjab.org/sub%20pages/mdm/feature.html>).

The Central Assistance under the Mid-Day-Meal Scheme consists of the following:-

- Free supply of foodgrains Wheat/Rice per child per school day from nearest Food Corporation of India (FCI) Godown @ 100 Grams for Primary @ 150 Grams for Upper Primary Classes. The transportation of food grains from nearest Food Corporation of India (FCI) Godown to the Primary School carried out through PUNSUP and cost is reimbursed by the Government of India.
- Cost of Cooking includes cost of ingredients e.g. pulses, vegetables, cooking oil and condiments etc. It also includes cost of fuel and wages/remuneration payable to personnel or amount payable to an agency responsible for cooking.

Mid Day Meal Scheme in Punjab is implemented by the Department of School Education which is headed by Secretary at State level who is assisted by the Director General, School Education (DGSE). A separate Mid Day Meal Cell at the State Level consisting of a General Manager and four Managers has been constituted under DGSE. At The District Level one District Manager has been posted. One Assistant Block Manager has been posted in each Block to implement and supervise the Mid Day Meal Scheme at the school level. In schools, Principals/ /Headmasters / Headmistresses have been assigned the duty to supervise the preparation of MDM and in each schools teachers are assigned the duties of supervision of mid day meal preparation. Cook cum helpers has been appointed to cook and serve the food.

The main objectives of the MDM programme are:

- To increase enrolment, retention and to tone up the learning abilities of the beneficiaries, especially of children belonging to poor and down trodden sections of the society;
- To provide nutritious meal to the school going children to achieve the goal of Healthy mind in Healthy body;
- To promote friendship and feelings of common brotherhood among the children belonging to different caste, colour and creed by providing meals to them together and also to increase their retention in schools.

During 2011-12, in the district Bathinda, Muktsar, and Barnala, the hot cooked meal prepared in school premises is served to the students in the lunch hour in all schools. There are 661 primary and upper primary schools in Bathinda district; 549 primary and upper primary schools in Muktsar district; and 301 primary and upper primary schools in Barnala district; providing MDM to students regularly on all working days. The cooks cum helpers cook the food as per the decided menu and heads/ teachers in the school take care of the quality, quantity and hygiene in the school.

Chugh (2007) on Mid Day-Meal Scheme in Punjab state revealed that In all the schools the provision of meals was never interrupted though there has been delay in the delivery of funding. Teachers were running the meal programme going either by spending out of their pockets or borrowing from the store and vegetable vendors on loan basis. In few schools the parents were regularly visiting to supervise the quality of food grains and also the cooked food. Narula (2008) concluded that the mid day meal scheme in Haryana helped in increasing the attendance, having positive impact on enrolment and retention and ultimately leading to universalization of elementary education. Also bringing and retaining more and more children in schools especially girls. Srinivas (2008) reported that good practices in the implementation of MDM programme in the State of Karnataka are record keeping, display of information on school walls, active cooperation of SMC members and mother committees. Kaushal (2009) in a study of best practices in the implementation of mid-day-meal programme in Rajasthan enlisted advantages of MDM programme as a provision for quality meals; development of good food habits and social equity among

children; sustainable means of employment generation; development of social equity; involvement of community; and high attendance rate in Rajasthan.

2.0. Objectives of the Study: The following objectives were kept in mind while designing the evaluative study:

- To assess the extent of coverage of MDM;
- to assess the availability and adequacy of infrastructural facilities including manpower for implementation of mid-day meal scheme;
- to assess the availability of potable water and maintenance of safety and hygiene in schools;
- to assess the extent to which MDM has succeeded in achieving its objectives of making a positive impact on enrolment, attendance and to improve the nutritional status of children of classes I-VIII in Govt. schools.
- to assess the extent to which participation of parents and social equity are achieved;
- to study the perceptions of the teachers, students, parents towards the MDM scheme provisions;
- to highlight the problems faced by teachers to run the scheme and suggestions by students, parents and teachers.

3.0. Methodology

3.1. Overview

In this study, the descriptive survey method was used. The data was collected from the 582 students; 416 parents; and 353 teachers; of randomly selected 120 Govt. schools in three districts i. e. Bathinda, Muktsar, and SAS Nagar of Punjab in the months of November,2011 to February, 2012. The researcher used both quantitative & qualitative research approaches in the data analysis process. A questionnaire was used for data collection from the teachers, students and parents. An observation schedule was used for the on the spot data collection from the Govt. schools.

3.2. Sample

The data was collected from randomly selected 120 Govt. schools (40 in each district) in three districts i.e. Bathinda, Muktsar, and SAS Nagar. The sample includes the students, parents and teachers. Five students and four parents from each primary and upper primary school and two teachers from each primary school and four teachers from every upper primary school were interviewed regarding various provisions of mid day meal. The details of sample distribution is given in the Table 1

Table 1: Distribution of the Sample in Schools

District	Students		Parents		Teachers	
	PS	UPS	PS	UPS	PS	UPS
Bathinda	98	100	68	74	38	79
Muktsar	94	97	71	70	40	79
Barnala	97	96	69	64	40	77
PS= Primary Schools; UPS= Upper Primary Schools						

3.3. Data Collection Instruments and procedure

- To explore the perceptions of parents, students and teachers towards Mid day meal scheme, an interview schedule was prepared on the basis of the observation schedule of MHRD, Govt. of India for monitoring of MDM scheme. The interview schedule for parents includes total 20 items; for students includes total 12 items; for teachers includes 15 items.
- To evaluate and assess the MDM scheme in the schools of Punjab, an observation schedule prepared by Ministry of Human Resource and Development, Govt. of India was used with some modifications made by the researcher which has been filled on the spot by the investigator in each school. There were 14 items in the questionnaire related to different aspects of MDM scheme. To determine the content validity of the interview schedules, the peer and expert juries and language expert was used. On the basis of suggestions made by the experts, the questionnaires were modified
- Teachers, students and parents were personally approached and interviewed for data collection. The data of descriptive study has been analysed by using percentage analysis to give a clear picture.

4.0. Findings: The findings of the study are presented in the following paragraphs on the basis of quantitative data:

4.1. Regularity in serving of MDM and extent of coverage of MDM:

All the 120 sampled schools of three districts were serving hot cooked meal daily in the lunch hour to students. There has been no interruption stated by any student or teacher. The mid-day meal is served to all the students present on all working days. The hot cooked meal is prepared in the school premises in the kitchen cum store by the cooks. All the students in all schools have opted for mid day meal.

Table 2: Extent of Variation in Mid Day Meal intake

(As per school records vis-a-vis actual on the day of visit)

Institutes visited in three Districts: Primary Schools: 60, Upper Primary Schools: 60

District	Total Enrolment	%age of Enrolled children attending the school on the day of visit	%age of Enrolled children availing MDM as per School Records	No. of children availing MDM on the day of visit (Head count)	%age of Present children availing MDM on the day of visit
Bathinda	7951	86.42%	86.42%	85.32%	98.71%
Muktsar	6060	89.25%	89.25%	88.64%	99.31%
Barnala	9057	83.70%	83.70%	82.05%	98.03%

In 2011-12, all the children enrolled are covered under midday meal scheme and all students opted for mid day meal. As per field based data of the present students in sampled schools of three districts; 98.71% students in Bathinda; 99.31% students in Muktsar; and 98.03% students in Barnala District; were having MDM. Only a few students have brought food from home as something special has been prepared at home. Some students have gone to home that have nearby home to the school in the lunch hour, but it's not the regular feature as confirmed from the students. There was no evidence of surplus cooking or wastage of cooked food on the basis of daily estimation. Extra food was given to the cook cum helper or distributed among the

peons/ sweepers. However there is difference in day to day utilization of food due to menu as on the day of sweet rice cooking, all present students take food.

4.2. Adequacy of infrastructural facilities for implementation of Mid-Day Meal Scheme:

- All of the sampled schools in Bathinda and Barnala district have constructed their kitchen shed and were using it for cooking MDM as well as for the storage of food grains and other materials but in district Muktsar, in one school the kitchen shed was not complete. In all, kitchen sheds in 17.5% of sampled schools of three districts either do not have proper grills on windows or the gates are not good enough as per security of cylinders and the stored grains.
- All the schools were using LPG for cooking of the MDM but in Bathinda district 15%; in Muktsar district 20%; and in Barnala district 17.5%; of sampled schools were using firewood due to shortage of Gas cylinders. In 75% rural area schools, head teachers reported problem in gas cylinder procurement.
- The availability of drinking water has been confirmed in all the 120 schools of three districts but in Bathinda district 47.5%; in Muktsar district 15%; and in Barnala district 27.5%; of sampled schools the quality of ground water is not good as it's too much salty or heavy water is there. Water filters need to be installed in all schools and regular cleaning of the installed tanks is needed.
- In all the schools students bring their own tiffin to have MDM. Schools should have sufficient utensils to serve the food among the students.
- In 80% schools, the food is served in a disciplined manner and school authorities have been making the best possible effort to ensure hygiene in the place where mid-day meal is prepared and served. But in Bathinda district 10%; in Muktsar district 12.5%; and in Barnala district 7.5%; of sampled schools more discipline while serving and cleaning is required in the kitchen sheds. classrooms after the meals. In 77.5% of the schools, the teachers have been found to be reminding and prompting students to wash their hands before taking food.
- Cook cum helpers has been engaged in schools for cooking, serving the meals and washing the utensils. The salary is paid to them @ Rs. 1000/- per month. Majority of them are females belonging to SC/ST/OBC/ Minority communities.
- 85% of the students and 74% of parents are satisfied with the infrastructural facilities available for MDMS in the three districts.

4.3. Release of Cooking Cost and honorarium of Cook - cum - Helpers: The cooking cost @ of Rs. 2.89/- for primary and Rs.4.33/- for upper primary schools per student is provided to purchase ingredients for cooking. The cooks cum helpers are paid an honorarium @ Rs. 1000/- per month. But as reported by 81% of head teachers and teachers there was too much irregularity in the receipt of cooking cost, school heads had to either purchase the required ingredients on credit by paying from their own pocket or have to use funds from other resources. Most of the school heads in all districts were very stressed about the serving of MDM as they were not getting the cooking cost and the cook cum helper remuneration in time.

4.4. Impact of MDMS on enrolment, attendance and nutritional status of students:

- **Enrolment:** 55% of the interviewed teachers have reported that MDM scheme is not the only factor for enhancement of enrolment. There is overall increase in enrolment due to increase in population, awareness of parents for education, surveys by teachers, STC's, uniforms, books are the other factors for increase in enrolment in schools. MDM may have played some what role as more than 80% students are coming to schools by having a good breakfast in the morning.
- **Attendance:** In 35% sampled schools, teachers reported that MDMS has improved attendance after recess as to the previous trends; as students not go to home in recess and they remain whole day in the school. But according to 40% teachers and 56% parents, MDM is not the sole factor responsible for the increasing of attendance, awareness of parents towards education and monitoring by teachers are also the major factors responsible for attendance in schools.
- **Nutritional status:** In 63% schools, teachers reported that MDM improved, general well being (nutritional status) of the poor children. The most prominent outcome indicated is that it has been able to make a habit formation among students to have food at time. 50% of the parents are satisfied with the nutritious value of food and 24% parents stressed to make the food more variety based and 26% stressed to provide cheese, fruit, milk/ kheer etc in meals.

4.5. Perceptions of the teachers, students, parents towards the MDM scheme provisions: The perceptions of students, parents and teachers are taken on the various provisions made under mid day meal scheme i.e. arrangements; quantity and quality; variety of menu; availability of drinking water; participation in supervision; entitlement of child; social equity in serving of meals etc. The results are summarized in table 3 as follows in percentages on the basis of their responses.

Table 3: Perceptions of Students, Parents and Teachers' towards the MDMS Provisions

Provisions of MDM	Students		Parents		Teachers	
	PS (289)	UPS (293)	PS (208)	UPS (208)	PS (118)	UPS (235)
Awareness of MDMS	100%	100%	100%	100%	100%	100%
Mid-day meal arrangements	82%	84%	51%	61%	100%	100%
Satisfaction for MDM arrangements	100%	91%	75%	77%	100%	100%
Sufficient Quantity of MDM	100%	100%	100%	100%	100%	100%
Satisfaction for Quality of MDM	74%	70%	78%	74%	100%	100%
Variety of Weekly Menu of MDM	81%	73%	77%	78%	95%	92%
Availability of Drinking Water	89%	90%	96%	97%	100%	100%
Participation of parents in Supervision of MDM	12%	16%	42%	48%	94%	89%
Knowledge of Entitlement of Child for MDM	0%	2%	52%	61%	89%	86%

Social Equity in Serving of MDM	100%	100%	100%	100%	100%	100%
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- Perceptions of Students:** All the students were aware about the mid day meal scheme. Regarding mid-day meal arrangements i.e. kitchen shed, menu and appointment of cook cum helpers 82% of primary and 84% of upper primary class students were aware. All students were satisfied with the quantity of food and 74% of the primary and 70% of the upper primary students were satisfied with quality of food as students complained about the spicy, semi cooked chapattis / overcooked rice. Students demanded change of menu as dal- rice and dal- chapatti menu is not liked by the students. About 10% of the primary and upper primary students reported problem of drinking water availability in summer. Only 12% primary and 16% upper primary students have the knowledge of supervision of MDM by parents and majority of students have no idea about the entitlement of child under MDM scheme. No student has reported any discrimination in serving of food.
 - Perceptions of Parents:** All the parents were aware about the mid day meal scheme. Regarding mid-day meal arrangements i.e. kitchen shed, cooking cost, menu and appointment and honorarium of cook cum helpers 51% parents of primary and 61% parents of upper primary students were aware about this. Regarding satisfaction with the cleanliness and hygiene in kitchen shed and hygiene of cook cum helpers 75% of the parents of primary and 77% parents of the upper primary students were satisfied. All parents were satisfied with the quantity of food and 78% of the primary and 74% upper primary students' parents were satisfied with quality of food. Parents considered menu as nutritious and variety based; they suggested that cheese, curd and milk/ kheer/ fruit is to be added to the menu. 3-4% parents suggested installing of water filters in schools. Parents of 42% primary and 48% upper primary students participate in supervision of MDM but that too occasionally and they were not aware about the roaster of supervision. Only 52% parents of primary and 61% of upper primary students were aware about some of the entitlements of the students under MDM scheme. No parent has reported any discrimination in serving of food.
 - Perceptions of Teachers:** All the teachers were aware about the mid day meal scheme and were satisfied with mid-day meal arrangements i.e. kitchen shed, cooking cost, menu and appointment and honorarium of cook cum helpers. All teachers were satisfied with the quantity and quality of food and 95 % of the primary and 92 % upper primary teachers considered menu as nutritious and variety based; they suggested that more varieties to be included in the menu like fruit/ milk etc. About drinking water facility and social equity all teachers were satisfied and they suggested installation of water filters and water coolers in schools. 94% primary and 89% upper primary teachers stressed the need of supervision of food by parents and they reported that only a few parents were taking interest in supervision of MDM. Only 89% teachers of primary and 86% of upper primary were aware about entitlements of the students under MDM scheme. All teachers acknowledged the provisions of mid day meal scheme for providing nutritious food to students in the lunch hour.
- 4.6. Problems in MDM arrangements faced by Teachers: As per the discussions with teachers and head teachers; The first major problem is irregularity in the receipt of cooking cost and honorarium of cook cum helpers; school heads had to either purchase the required ingredients of cooking on credit by paying from their**

own pocket or have to use funds from other resources. Most of the school heads were very stressed about the serving of MDM as they were not getting the cooking cost and the cook cum helper remuneration in time. Second problem is of non availability of LPG at the school doorstep and non availability of cooking gas on demand by schools lead to delay in cooking of meals. The school heads were considering it very hard to carry on the MDM scheme due to paucity of funds and non - availability of cooking gas.

5.0. Conclusion:

The mid day meal scheme run by the State of Punjab with the help of central assistance is running well. The only major constraint was the irregularity in receipt of cooking cost and honorarium of cook cum helpers. Some highlights of the Mid Day Meal Scheme and suggestions for improvement given by all the stake holders as discussed with the researcher are as follows:

- **Delivery of Cooking Cost:** The distribution of cooking cost to school should be made regular as it's very difficult for head teachers to provide cooking cost from other sources or to purchase cooking ingredients on credit from the local market. Cooking cost be transferred to school account on one month advance basis.
- **Variety of Menu:** As in Punjab, majority of students are coming to schools by having breakfast at home. As reported by students, they did not like rice- dal; dal – chapatti menu; so, something new should be added else than routibne food. As parents suggested that fruit, cheese, curd, milk or kheer should be added to MDM.
- **Honorarium to Cook cum Helpers:** The cook cum helpers should be given honorarium on monthly basis as due to non distribution of grants on monthly basis, it got delayed. As per the suggestion of teachers and parents; honorarium of cook- cum – helpers need to be increased.
- **Drinking Water:** However, all schools have good drinking water facilities. But due to heavy and salty water in 40% of the schools, water filters need to be installed. There is an urgent need to make the drinking water area clean and hygienic in 30% of the schools.
- **Maintenance of Kitchen Sheds:** All schools have kitchen sheds but no grant is provided for the maintenance of kitchen sheds. A special grant should be given each year to maintain the kitchen sheds.
- **Availability of Cooking Gas:** Cooking gas need to be provided at the school door step and more cylinder refills should be given to schools on the basis of strength of students.
- **Participation of parents in supervision:** The steps are to be taken to make active participation of parents in supervision of mid day meal at school level. As it will lead to improve quality and menu can also be changed as per the guidance of the parents as per the demands of the students. Mother Teacher Associations should be made active in all schools for the supervision of food preparation and distribution.

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