

Mid-Day Meal

Nutrition on Paper, Poor Food on the Plate

SIDDHESHWAR SHUKLA

The Mid-Day Meal Scheme is the world's biggest school lunch programme and is being implemented all over India for primary and upper primary school students. However, nutrition and hygiene are now among the main challenges it faces. Out of 876 test reports of mid-day meal samples in Delhi from 1 January 2012 to 31 March 2013, more than 90% failed to meet the standard of 12 gms of protein and 450 calories. A number of loopholes in the scheme need to be plugged if nutritious food, not just something cooked, is to reach the plates of poor students.

Introduction

Launched in 1995, the Mid-Day Meal Scheme (MDMS) has been implemented in India since 2008-09 in government-run and government-aided primary and upper primary schools.¹ In 2012-13, more than 104 million students were covered under the MDMS, and government agencies had created a huge infrastructure to feed children. Every year, an annual review of the scheme is conducted on the basis of some criteria such as the number of students and institutes covered, but the quality of the food finds little mention in government records.² The question arises whether the food under the MDMS constitutes at least one nutritious meal a day to poor students or whether it is just something to fill a hungry stomach.

The vision of the MDMS is clear on the quality of the food in terms of its nutrition value, as emphasised by the Supreme Court in its 2001 order.³ The union finance minister in his budget speech in 2004 stated, "If primary education and nutritious cooked meal scheme can work hand in hand, I believe there will be a new dawn for the poor children of India". The government's vision was reflected in the mid-day meal guidelines of the National Programme of Nutritional Support to Primary Education (NP-NSPE) in 2006.⁴ It says, "The MDMS does not merely aim to provide a cooked meal, but one satisfying prescribed nutritional norms". The policy also introduced management monitoring and evaluation (MME) for the MDMS and management guidelines to ensure the quality of food. A detailed guideline was issued by the Ministry of Human Resource Development (MHRD) in 2009 to ensure that the meal met prescribed nutritional standards.⁵ This was reiterated while highlighting the role of the MDMS in fighting widespread anaemia – "As per MDMS guidelines green leafy vegetables should be added in the MDMS meal so that the children get the nutritional benefits and one portion of the iron of the day can be fulfilled".⁶

This paper analyses the ground realities of the MDMS in Delhi, using laboratory reports of MDM samples in the city; field surveys; kitchen experiments; reports of a third party monitoring institute (MI); and data obtained through the Right to Information (RTI) Act from the directorate of education (DOE), government of the National Capital Territory (NCT) of Delhi; the Delhi municipal corporations (DMCs), north, south, and east; and the New Delhi Municipal Council (NDMC).⁷ In addition, secondary data was available from the various government agencies responsible for implementing and monitoring the scheme.

Siddheshwar Shukla (siddheshwar.shukla@gmail.com) is with the *Millennium Post*, New Delhi.

The MDMS was introduced in Delhi in 1995-96 for primary school students of the DMC. Earlier, the scheme had been confined to primary schools in *jhuggi-jhopri*-hutment colonies, rehabilitation colonies and slums. The DMC, following an order of the Supreme Court on 28 November 2001 on the universal supply of cooked food in primary schools, came up with the policy guidelines of NP-NSPE (2006). It extended the MDMS to all students enrolled in its primary and aided primary schools through centralised kitchens operated by non-governmental organisations (NGOs).⁸ The scheme was simultaneously implemented in primary schools of the DOE, the NDMC, and the Delhi Cantonment Board (DCB), and it was extended to upper primary schools of the DOE in 2008-09.

The system of centralised kitchens in Delhi was introduced by the DMC in 2003 by engaging some NGOs to provide cooked food for MDMS on a pilot project basis. At a time, around 36 NGOs were supplying MDMS to DMC primary schools, but in 2005 the DMC entered into formal contracts with 11 NGOs to supply MDMS. In 2008, the DMC, through a fresh contract, engaged eight NGOs for three years, which was extended for more than six months due to procedural delays in awarding new contracts. The DOE has separate contracts with NGOs running centralised kitchens in Delhi. The agencies implementing the MDMS in Delhi are the DOE, DMCS, NDMC, and the DCB.⁹ As the DCB provides MDMS to only 2,000 students and did not provide any data, it has not been included in the study.

The programme approval board of mid-day meal (PAB-MDM), the apex body in the country to review, monitor and approve the budget for the MDMS under the MHRD, approved a budget to feed 1.29 million students in Delhi in the financial year 2012-13. Of them, 8,22,000 were primary school students and 4,75,000 were upper primary students. The three DMCs entered into a fresh agreement with eight NGOs in 2012, and supplied MDMS to more than 1 million students in their 1,741 primary and 44 affiliated primary schools. The NDMC has allocated 20,000 students to the ISKON Food Relief Foundation and 10,000 students to Manjeet Caterers. The council provides MDMS to 13,956 primary students and 5,809 upper primary students. The DOE has agreements with 17 NGOs to supply cooked food under the MDMS to around 1,49,000 students in its primary and upper primary schools.

Nutritional Provisions

As per the nutrition and quantity parameters of the MDMS, a primary school student must get a minimum of 12 grams of protein and 450 calories per meal, while an upper primary student must get 20 gm of protein and 700 calories per meal. A meal should have 100 gm of grains (rice/wheat), 20 gm pulses, 50 gm vegetables, and 5 gm oil for primary students, and 150 gm grains (rice/wheat), 30 gm pulses, 75 gm vegetables, and 7.5 gm oil for upper primary students. The nutrition content should further be improved by using green leafy vegetables and double fortified salt. The constituents of 13 major dishes of the MDMS and their cooking methods were prepared by chefs of the Oberoi Hotel, New Delhi, and have been provided as a sample.¹⁰ Delhi has six different

dishes served in a week – three wheat-based ones and three rice-based ones.¹¹

On 15 September 2010, the DOE prescribed quantity standards for the cooked food for children.¹² Under it, a primary school student should get a minimum of 250 gm of a rice-based dish and 200 gm of a wheat-based dish, while an upper primary student should get a minimum of 375 gm and 250 gm, respectively. All government agencies implementing the MDMS in Delhi were to constitute committees for surprise inspections of the centralised kitchens at least once a week and to take action if norms were violated. The schools were also to have weighing machines to weigh the meals supplied to them, and were to complain if there was any short delivery. On 23 July 2010, the DOE directed the implementing agencies that the MDM should not be same on a particular day of a week in both the morning and evening shifts and that payments must be made for only those who consumed food, not on the basis of the daily attendance register. In 2009, the Shriram Institute for Industrial Research (SIIR), Delhi, was engaged for testing the protein and calorie values of the food supplied to children. Initially, the SIIR used the “dry method” for testing, but after a year switched to the “wet method”. The NGOs have been protesting against the new method, and matter is now under the consideration of a committee of nutrition experts of the MHRD.¹³

Analysis of Test Reports of Samples

Representatives of the SIIR collect cooked food samples of MDMS from kitchens and schools for testing their protein and calorie value in 200 gm of wheat-based and 250 gm of rice-based dishes. The food is also tested for *E coli* and salmonella, and all the reports analysed in this study were negative for these bacteria. As per the agreement, NGOs can be fined for deviation from the nutritional standard more than 5% and no payment will be made for defective supplies.¹⁴

(a) **DOE, Government of NCT, Delhi:** The DOE has a provision to test four samples of MDM food from each NGO per month, two collected from their kitchen and two from schools (the receiving end).¹⁵ It provided a compiled report of MDM sample testing (number of failed and passed samples in the form of a table) for three years, but refused to share individual test reports. Only five (1.0%) of the 466 MDM samples tested in 2010-11 satisfied the prescribed nutritional norms, while it was 27 (5%) of 541 MDM samples in 2011-12, and 50 (17%) of 288 samples in 2012-13. Of the 50 MDM samples that passed in the 2012-13, 12 were from the centralised kitchens of NGOs and 38 from schools. Similarly, of the 27 samples that passed in 2011-12, 10 were from the kitchens and 17 from schools.¹⁶

Individual Test Reports of DOE

The DOE, after an order of the First Appellate Authority, RTI on 5 March 2013, provided 557 individual test reports of MDM samples examined between 1 January 2012 and 5 March 2013. As 15 NGOs (one worked for a very short duration) were supplying MDMS to DOE schools in this period, the number of test reports for these 13 months (one month summer vacation)

should have been 780 (15 × 4 × 13). Further, the testing of MDM samples was stopped by the SIIR in January 2013 because issues cropped up between the DoE and NGOs over who would pay for the testing under the renewed agreement.¹⁷

The 557 individual test reports reveal a huge difference in the protein and calorie values of the same MDM dish. The protein content was below 6 gm in 19 food samples and between 6 gm and 9 gm in 185 samples (Table 1). Among the six dishes, 14.3% of the samples of rice and *kadhi* were found to have a protein level less than 6 gm and only three of the 74 samples had the minimum standard of 12 gm. However, 19.4% of the samples of puri and *chhole* had protein above 14 gm, while 4.0% of the samples of puri and *aloo sabji* came in this category. A total of 29 out of 557 food samples had protein content more than 14 gm. The calorie value of the samples also fluctuated, with 74 samples having less than 225 calories and 59 samples having more than 450 calories (Table 2). Among those, 22 samples had more than 500 calories.

Table 1: Protein in MDM Food Samples of DoE

Dish/Protein (gm)	0-6	6-9	9-12	12-14	Above 14	Total Samples
1 Rice and chhole	1.9	38.3	48.6	9.3	1.9	107
2 Rice and dal	0.9	35.8	56.9	6.4	–	109
3 Rice and kadhi	13.5	50	32.4	4.0	–	74
4 Halwa and chana	1.5	48.5	35.3	10.3	4.4	68
5 Puri and chhole	–	14.6	35.9	30.1	19.4	103
6 Puri and aloo sabji	5.2	20.8	50	19.8	4.2	96
	3.4	33.2	44.3	13.8	5.2	557

The numbers show the percentage of samples.

Source: DoE, Government of NCT, Delhi.

Table 2: Calories in MDM Samples of DoE

Dish/Calorie	0-225	225-350	350-450	450-500	Above 500	Total Samples
1 Rice and chhole	11.6	84.1	4.7	–	–	107
2 Rice and dal	16.5	79.8	3.7	–	–	109
3 Rice and kadhi	45.9	54	–	–	–	74
4 Halwa and chana	11.8	86.8	1.5	–	–	68
5 Puri and chhole	–	19	43.8	20.9	16.2	105
6 Puri and aloo sabji	2.1	46.8	29.8	15.9	5.3	94
	13.3	61	15	6.6	3.9	557

The numbers show the percentage of samples.

Source: DoE, Government of NCT, Delhi.

Table 3: Protein in MDM Samples of DMCs for 2012-13

Dish/Protein (gm)	0-6	6-9	9-12	12-14	Above 14	Total Samples
1 Rice and chhole	–	66.2	32.4	1.5	–	68
2 Rice and dal	2	52	44	–	2	50
3 Rice and rajma	–	46.5	51.2	2.3	–	43
4 Halwa and chana	3.7	48.1	35.2	11.1	1.9	54
5 Puri and chhole	–	6.8	6.8	36.4	43.2	44
6 Puri and aloo sabji	–	13.3	48.3	21.7	16.7	60
	0.9	40.1	37.6	11.6	9.7	319

The numbers show the percentage of samples.

Source: DMCs.

(b) Delhi Municipal Corporations: The three DMCs provided reports on the tests of MDM samples in 2011-12 and 2012-13. Of the 158 MDM samples tested in 2011-12, only 14 (8.9%) satisfied nutritional norms. In 2012-13, only 13 (8.0%) of 161 samples had an acceptable nutrition standard. Of the 319 (158 plus 161) food samples, three had a protein content below 6 gm and 128 had it between 6 gm and 9 gm. However, 69 samples had a

protein value more than 12 gm and 31 of these had protein more than 14 gm (Table 3). The calorie value was poor in these samples with 54 having a calorie value less than 225 and 177 samples having between 350 and 450 calories (Table 4). Only 29 samples crossed the 450-calorie mark, and 10 of them had more than 500 calories.

Table 4: Calories in MDM Samples of DMCs for 2012-13

Dish/Calorie	0-225	225-350	350-450	450-500	Above 500	Total Samples
1 Rice and chhole	29.4	66.2	2.9	1.5	–	68
2 Rice and dal	24	76	–	–	–	50
3 Rice and rajma	30.2	69.8	–	–	–	43
4 Halwa and chana	14.8	77.8	7.4	–	–	54
5 Puri and chhole	–	13.6	56.8	20.5	9	44
6 Puri and aloo sabji	1.7	26.7	30	31.7	10	60
Total	16.9	55.5	15.4	9	3.1	319

The numbers show the percentage of samples.

Source: DMCs.

The high levels of protein and calories in some food samples were reportedly because kitchens had advance information of inspections from senior officers or public representatives (mayor, chairman of education committee, councillor, or education officers). The number of samples tested was less than agreed here as well. As per the agreement, 46 samples were to be tested per month, which adds up to 506 test reports for 2012-13 [46 × 11 (one month leave)], but only 161 test reports were available. Here too, the testing of MDM samples had been stopped after 31 October 2012 on the issue of who would pay the SIIR.¹⁸

(c) New Delhi Municipal Council: In 2012-13, NDMC officers collected seven samples of MDMs in surprise inspections and sent them for testing. The samples were from ISKON Food Relief Foundation and they were tested in Spectro Analytical Labs, New Delhi. They were found to have a protein value more than double the minimum required but five of the seven samples did not have the necessary calories (Table 5). But these test reports seem unreliable for two reasons.

Table 5: Test Reports of MDM Samples of NDMC (in 2012)

Dish	Protein (gm)	Calories
1 Rice-rajma	23.52	310
2 Puri-aloo chhole	12.24	392
3 Rice-chhole	26.78	305
4 Rice-rajma	24.13	475
5 Rice-chhole	51.625	297.5
6 Puri-aloo chana	19.30	380
7 Halwa-chana	27.22	602

The tests were conducted on 100 gm of cooked MDM samples, which had been adjusted as per quantity norms.

Source: NDMC.

(i) The protein content of sample number (2) is 12.24 gm but in sample number (6), it is 19.30 gm. Both the dishes are wheat based and have the same food content. However, the fluctuations in energy content are low and only two samples, (4) and (6), pass the prescribed calorie norm. (ii) ISKON Food Relief Foundation has only one kitchen at Alipur village, Mathura Road, Delhi and supplies MDMs to all its clients – the DoE, DMCs and NDMC. Most of the test reports by the SIIR done for the DoE and DMCs show the food was below standard.

After receiving an RTI query on 26 November 2012, NDMC officers sent one food sample to SIIR on 10 December 2012. The cooked food sample – puri and aloo chhole – was from N P Senior Secondary School, Bapu Dham, New Delhi, supplied by ISKON Food Relief Foundation. The report shows the sample

having a protein value of 12 gm and calorie content of 467, marginally meeting the prescribed norms. Manjeet Caterers also supplies MDMs to schools under the NDMC jurisdiction, but not a single sample was drawn from this supplier in 2012-13.

Survey of MDMs in Delhi

The survey was conducted in the context of the MDMs in the primary schools of the NCT run by DMCS, the DOE, and the NDMC. Its aim was to collect data and present a representative picture about the quality (constituents and taste) and quantity (the net weight of the food served to students) of food being served under the scheme through centralised kitchens run by NGOs.

At the time of survey, 19 NGOs were supplying MDMs to schools of the government agencies. Of these, eight were common to more than one government agency, while the rest were confined to one. For the study, all the eight NGOs were selected and three more were chosen through a random sampling method from the remaining 11 NGOs.

Further, 14 schools were selected for the study through the stratified weighted sampling method from where these 11 NGOs were supplying food. The selected institutes were eight from DMCS, five from the DOE, and one from the NDMC. The schools of the DOE and NDMC had both primary and upper primary sections. The food served to upper primary students was less than the prescribed quantity and quality, but the study focused only on primary students. The selected schools were surveyed on different days to observe the distribution of various dishes as NGOs followed a pre-decided menu of six different dishes – three wheat-based and three rice-based – in a week.

In each school, 10 children were selected from the school attendance register. Of these, two were selected through the lottery method to get their food weighed. Thus, we selected 140 children and weighed 28 food samples. The data were collected through interviews. In addition, data were also collected through short-term interviews of 14 teachers in charge of MDMs at schools, five persons in charge of MDM cells in government agencies, and 11 heads/spokespersons of NGOs. In the study, 140 interview schedules and 30 interview guides were used. The findings of the survey can be summarised as follows.

(a) Quantity of Food: Twenty-three (82%) of the 28 food samples fell short of the prescribed minimum weight. A cooked rice-based dish (including a second dish such as dal or chhole) in the plates of class IV-V students was 220 gm to 240 gm. In the plates of nursery to class III students, it was between 80 gm and 100 gm. Puri, a wheat dish, weighs 25-26 gm each and is served with potato or chhole and a spicy watery gravy. Class IV-V students were given a maximum of three puris, but nursery to class I students got one or two puris along with a second dish. This dish was 50-60 gm to 150-170 gm. Each student got 120 to 160 gm of the wheat dish *suji ka halwa* and boiled gram.

(b) Constituents and Taste: Green vegetables/leafy vegetables were not seen in the food served to children. The dal, sabji and chhole were mostly watery, and there were no dry fruits in the

suji ka halwa, which was served once a week along with boiled black gram. It was described as tasteless by 90% of the students.

Around 85% of the students said the food in general was tasteless but they ate it as a group activity or discipline as it was distributed by making them to stand in a line at a fixed time. However, 15% students said that the food was okay (*theek hai*). Students were also seen packing the remaining food in their tiffins to take home as throwing away food was not allowed on school premises.

(c) Claim of Loss by NGOs: The NGOs running centralised kitchens in Delhi contend that meeting nutritional norms is impossible given high inflation and the rise in the cost of cooking. They have made several representations to the DOE to increase the cooking cost to Rs 5/6 per student at the primary level and proportionately for the upper primary level. Those in charge of MDM cells echoed these arguments. They admitted that quality was being compromised but expressed inability to take action as the NGOs threaten to pull out. This is why despite the provision of a penalty and a clause to terminate the contract for repeatedly supplying poor food, NGOs are never fined and negative SIR reports buried. The centralised kitchens are like big factories where food is cooked in giant containers. Each NGO claims to have invested Rs 70 lakh to more than Rs 1 crore in a kitchen. They are also engaged in providing food for other government-sponsored projects for children, women, and patients in government hospitals.

In our visits to schools we came to know that the attendance registers were invariably inflated by 20% to 30% (headcount was less than the attendance). Director-level officers of the government agencies admitted that it was commonly done in almost all the schools of Delhi to keep the jobs of teachers secure, a majority of whom are contractual and appointed on the basis of enrolment cum average attendance. Further, a significant number of students do not eat the “tasteless” MDMs and bring food from their homes.¹⁹

Management, Monitoring and Evaluation

The government agencies implementing the MDMs in Delhi are supposed to constitute three-tier committees – (a) a school-level committee; (b) a surprise inspection committee of senior officers; and (c) an expert committee to ensure the quality of foodgrains provided by the Food Corporation of India (FCI). In addition, a structure of MME should also exist at the state level for monitoring the implementation of the scheme and ensuring the quality of food served to children. In addition, the Centre for the Studies of Developing Societies (CSDS) has been assigned the job of being the monitoring institute (MI) for third-party monitoring of the scheme in Delhi.²⁰ Besides, Delhi has facilities for regularly testing the protein and calorie value of food samples through the SIR. The reports of all these are presented before PAB-MDM, the top body of the MHRD, for a state-wise annual review and approval of the budget for the next financial year.

The NP-NSPE (2006) makes it compulsory to expend 1.8% of the total monetary assistance to states/union territories under

the MDMS (free foodgrains, transport cost, and cooking cost) for MME. But Delhi does not have any MME structure and the bureaucracy never took it seriously despite several guidelines, and instructions of the PAB-MDM.²¹ In a review of the MDMS in Delhi by the PAB-MDM on 3 April 2012, the special secretary of Delhi assured the centre that an MME structure would be in place in three months, but it was never fulfilled. Hence, the funds remained almost unutilised (Table 6). A fraction of the MME fund of 2011-12 and 2012-13 was used to fund the re-engagement of NGOs when their previous contracts expired in August 2011. The money allocated for MME in these years was used to pay for expenses – advertisements inviting the expression of interest from NGOs, inspection of their kitchens, convening meetings, and reimbursing experts and officials.

The report of the MI in Delhi for 2012-13 and 2013-14 pointed to several loopholes at the ground level but the findings failed to trigger remedial action by the bureaucracy to improve matters.²⁵ The report mentions that in 85% of the schools MDM cards were prepared on the basis of school attendance, not actual meal consumption. This means NGOs were being reimbursed on the basis of the number of students present on the attendance register, not on the basis of the number of students who actually consumed food. The finding clearly indicates that NGOs were reimbursed for more than the actual units of MDMS consumed. The difference between reimbursement and actual consumption was found to be 8% at the primary level and 11% at the upper primary level. It was also found that the NGOs of east DMC received FCI foodgrains 50 days after serving MDMS to children, while the cooking cost was reimbursed 50 to 60 days later. As per the NP-NPSE norm, grains and the cooking cost have to be paid for in advance. Further, the centralised kitchens did not share any information about their accounts during the visits.²² The helpers engaged for distributing food among the students had a meagre pay of Rs 500-600 per month.

On the quality of food under the MDMS, the MI said that the quality of puris and rice was not satisfactory; puris were found to be hard, and rice many a time undercooked or overcooked. The quality of dal and chhole was also found to be poor. The MI reported that green vegetables were occasionally (not regularly) mixed with dal and curry. Around 70% of the children did not like halwa and black gram (2011-12) and 57% said that the quality of rice and puri was poor. The MI also revealed that the difference between the actual consumption of meals was 7% in primary schools and 12% in upper primary ones in east Delhi, and 9% in primary schools and 13% in upper primary ones in north-east Delhi.

How NGOs Save Money from MDMS

In contrast to their claims, the NGOs in Delhi harvest huge monetary benefits by compromising on the quality and quantity (weight) of food served to children under the MDMS. As per the rule, the grain allocated to them from FCI godowns under the

MDMS should directly go to stores at their kitchens and it can only be used for the MDMS. The government pays around Rs 75 per 100 kg as transportation cost. But all the grain allocated to NGOs from FCI godowns is diverted to the godowns of certain flour and rice mills. These mills have been engaged by the NGOs to supply them wheat flour, rice, and suji in advance for the MDMS. They later reimburse these mills with the grain allocated to them by the government agencies against their bills for supplying MDMS to schools. The mills reportedly process this high-quality grain and sell its products in the market with their brand name, while supplying low-quality wheat flour, suji, and rice to the NGOs for MDMS.²³

To assess the amount of grain saved by NGOs by giving less food to children in their plates, we conducted some kitchen experiments, which revealed that 100 gm of average quality dry rice converts to 270-300 gm of cooked rice, and 100 gm of wheat flour makes six puris weighing 158-162 gm. Also, 100 gm of suji converts into 360-370 gm of halwa after cooking. Thus 100 gm of raw grain per student per meal provided to the NGOs for primary students is sufficient for two to four students in terms of weight.²⁴ As the NGOs are paid on the basis of the number of students present on the school register on that particular day, they save a huge amount of the foodgrain and cooking cost paid to them per student.

The MDMS provisions, however, try to ensure that each and every paisa of cooking cost is utilised to cook food and making it nutritious (Table 7). In 2011-12, the cooking cost of an MDM in Delhi was Rs 2.89,

which was to be expended at Rs 1.12 for pulses, and Rs 0.72 for vegetables. It is clear that money could not be diverted from the cooking cost to any other head.

In Delhi, the NGOs are supposed to bear some additional expenses through their own resources, for which they are allowed to collect donations from the corporate sector, organisations, and individual donors. These additional expenses include human resources (managing kitchens and offices, security guards, workers for cleaning the grain, cooks, and helpers to distribute food), transportation of food from kitchen to school, construction of kitchens, purchase and maintenance of kitchen equipment, food containers, utensils, and the cost of testing food samples in laboratories (SIIR charged Rs 4,500 per sample in 2012-13). In the survey/short-term interviews, all those in charge of MDM cells in Delhi accepted that they give some allowance to NGOs as they fund these additional expenses from their own resources. In other states, these additional expenses are funded by the MHRD under the MDMS itself, but under two separate heads, infrastructure and cooking for MDM.

Taking refuge behind the goodwill earned from funding additional expenses from their own pocket, the NGOs reportedly

Table 6: Utilisation of MME Fund in Delhi

Year	Allocation (Rs Lakh)	Utilisation (Rs Lakh)	Percentage Utilisation
1 2012-13	194.56	34.37	18
2 2011-12	198.74	25.37	13
3 2010-11	172.00	7.00	4.0
4 2009-10	236.18	3.4	1.4

Source: DOE, Government of NCT, Delhi.

Table 7: Cost Composition of a MDM (in 2005)

Constituents	Quantity (Gm)	Cost (Rs)	Calories (Gm)	Protein (Gm)
1 Grains (wheat or rice)	100	Free	340	8
2 Pulses	20	0.50	70	5
3 Vegetables	50	0.50	25	0
4 Oil and fat	5	0.25	45	0
5 Salt and condiments	To taste	0.10	–	–
6 Fuel	–	0.20	–	–
7 Total	175	1.95	480	13

The cooking cost allocated in 2005 was Rs 2 per meal.

Source: NP-PSPE 2006, *Guidelines for MDM*, p 43.

enjoy the right to steal as much grain and money as they can by presenting inflated bills for reimbursement. This cannot be done without the direct connivance of officers of MDM cells, school principals, and teachers. Surprisingly, the NGOs were passive to an offer that the MHRD would shoulder some additional responsibilities. In 2010, the PAB-MDM approved engaging 18,740 cooks-cum-helpers for the financial year 2011-12 and also released the funds on a 50:50 sharing basis between the centre and states. Not even a single cook-cum-helper had been appointed in Delhi by 2012-13.²⁵ The reason behind this apathy of NGOs was that the state (DOE) had passed on its share of 50% responsibility to them. The DOE further proposed releasing the centre's share directly to cooks through the school principals concerned. This was unanimously rejected by the NGOs who preferred to continue with their own cooks-cum-helpers. Interestingly, the demand for cooks-cum-helpers had come with the NGOs requesting the government to reimburse the payment made to cooks-cum-helpers. The PAB-MDM has reiterated that the DOE appoint cooks-cum-helpers for 2013-14, and the government has promised to appoint the sanctioned 18,740 cooks-cum-helpers in the current financial year.²⁶

The representatives of some NGOs in the survey maintained that they collect donations from the private sector to fund their additional expenses, but at the same time claimed to be in a financial crisis, having submitted several representations to the government to increase the cooking cost.²⁷ Contrary to their claim of financial losses, these NGOs refused to show their accounts to an expert committee of the MHRD in 2011-12, which was mandatory under NP-NSPE (2006).²⁸ Further, these NGOs were found to be using low-quality grain for preparing MDMS, as was revealed by a joint secretary of the MHRD in a meeting of PAB-MDM on 3 April 2012.²⁹

Thus, in Delhi, the NGOs siphon off MDMS funds in four ways. (a) By selling the extra grain got by serving less quantity of food to students to flour and rice mills; (b) by not cooking the remaining grain and saving the conversion/cooking cost; (c) by fudging attendance records; and (d) by degrading the quality of grain. Teachers silently cooperate in fudging attendance records to secure their jobs, as fewer students in attendance registers would mean loss of jobs or transfers to other schools.³⁰ The amount of money stolen from the plates of poor students may seem to be insignificant, but even just adding the number of students entitled for the MDMS in Delhi puts the figure at Rs 295.79 crore in three years, 2009-10, 2010-11, and 2011-12. A pan-India projection of this figure works out to Rs 23,106 crore.³¹

Conclusion and Agenda for Discussion

The bureaucrats try to downplay the issue by dubbing the low quality of the MDMS a nationwide problem.³² But deviations from nutritional standards are too huge to be ignored as some food samples had a protein content as low as 2.9 gm and calorie value of 236.6 (Table 8). The majority of failed samples in Delhi, as seen in the test reports, clearly indicate that quality is being highly compromised by all the government agencies.

Table 8: Least Nutritious MDM Samples in Delhi (1 January 2012 to 31 March 2013)

Dish	Date in 2012	Protein (Gm)	Calories
1 Rice-kadhi	25 February	5.1	165.4
2 Rice-dal	10 December	6.5	241.7
3 Puri-aloo	7 December	2.9	472.6
4 Puri-aloo	17 January	5.0	236.6
5 Rice-dal	17 February	5.8	205.7
6 Rice-dal	31 January	8.9	171.4
7 Rice- chhole	17 December	5.3	192.2
8 Halwa- chana	29 August	4.1	275.6
9 Halwa- chana	21 January	8.6	149.5
10 Puri-chhole	19 July	6.2	388.7
11 Rice-rajma	7 September	7.8	210.5

Source: DOE, NCT Delhi and DMCs.

The argument that the cooking cost is insufficient merits some attention. It was increased from Rs 2 in 2006-07 to Rs 3.11 in 2012-13, but wholesale price-based inflation increased by 9.56% in 2010-11 and 8.94% in 2011-12 while consumer price index-based inflation was 10.21% for the first quarter of 2012-13.³³

Thus the MDMS in Delhi faces a double whammy – first, the allocated cooking cost is insufficient to meet nutritional norms because of high inflation, and second, a huge portion of whatever is allocated is siphoned off. The standing committee of Parliament for the MHRD in one of its reports in 2013 quoted media reports on poor implementation and monitoring of the MDMS in Delhi. “If situation is such in the capital what would be the position in interior could be imagined”, the committee observed.³⁴ Further, a recent medical survey has found that more than 70% of the primary school students in Delhi are anaemic.³⁵ A report of the Comptroller and Auditor General of India also pointed to the poor implementation of the scheme in Delhi.³⁶ However, the implementing agencies of the MDMS in Delhi have again trusted the same NGOs to supply food to children for the next three years.

The problem of poor quality of food is not just limited to Delhi as the same NGOs have MDMS contracts in Uttar Pradesh, Bihar, Gujarat, Punjab, Chhattisgarh, Karnataka and Maharashtra, and the situation at the school level seems no better. Replying to RTI queries, 11 state governments and union territories – Haryana, Gujarat, Himachal Pradesh, Kerala, Odisha, West Bengal, Uttarakhand, Madhya Pradesh, Tripura, Sikkim and Goa – submitted that there is no testing of protein and calorie value of MDMS food samples in their jurisdiction. However, Karnataka stated that in 2009, MDM samples from six schools in the state were collected for nutritional analysis. The average protein content in the six samples was 3.2 gm per 100 gm, with a minimum of 0.8 gm and maximum of 4.6 gm. In addition to the MDM, eggs and milk are supplied in Karnataka,

Table 9: Complaints against MDM Food in India

Year	Complaints	Departmental Action (Warning, Transfer, Suspension and Action against Supplier)	General Corrective Action	Baseless/Not Proved/ Not Related to MDM	Enquiry Pending
1 2010	7	3	1	3	–
2 2011	9	3	2	4	–
3 2012	16	3	5	5	3
4 2013**	4	–	–	–	4

** Till 5 April 2013.

Source: MDM Division, MHRD.

and eggs and bananas are supplied in Tamil Nadu as nutritional supplements, claimed the states. None of the states has a system to assess the impact of the MDMS on the health of their children, revealed an RTI reply.

Low-quality MDMS are surely filling the hungry stomachs of poor children. But are they helping the nation fight malnutrition and anaemia? The number of failed MDM samples seen alongside the high percentage of anaemic primary school students in Delhi indicates that food is a non-starter in the fight against malnutrition-related diseases. It is also sometimes

infested with worms, insects, lizards, insecticides, and poison, making students sick and even claiming their lives.³⁷ In Delhi, when any such incident comes to light, the MDM cell of the DOE cuts the allocation of students to the NGO concerned and transfers them to another empanelled NGO.³⁸ The MDM department of the MHRD is limited to reporting only MDM incidents (Table 9, p 56). The time has come to shift our focus from traditional performance indicators such as coverage of students, institutes, and geographical area to the nutritional value of the cooked food supplied through the MDMS.

NOTES

- The official name of this scheme was the National Programme of Nutritional Support to Primary Education (NP-NSPE 2006), which was extended to the upper primary level in 2008-09 and renamed the National Programme of Mid Day Meal in Schools, but is commonly referred to as the Mid Day Meal Scheme (MDMS).
- The programme approval board (PAB) is the apex body for a state-wise annual review of the MDMS in the country and also approves the budget for states/union territories in advance of the coming financial year. The reports and approvals are available at <http://mdm.nic.in/>.
- The Supreme Court of India in 2001 directed state governments and union territories to implement the MDMS for the primary level universally (*People's Union for Civil Liberties vs State of Rajasthan* in 2001). The Court instructed providing a meal with a minimum of 300 calories and 8 to 12 gm of protein each day to children for a minimum of 200 days in a year.
- The NP-NSPE (2006) prescribes minimum 12 gm of protein and 450 calories for primary school students per meal per day. The food must have green leafy vegetables, pulses and double fortified salt.
- See "About MDM" at <http://mdm.nic.in/>
- See Anemia/Malnutrition, School Health Programme at <http://mdm.nic.in/>
- The Delhi Municipal Corporation (MCD) was tri-furcated from 26 April 2012 into North Delhi Municipal Corporation (North DMC), South Delhi Municipal Corporation (South DMC) and East Delhi Municipal Corporation (East DMC).
- The MDMS food in Delhi is supplied by centralised kitchens run by NGOs. In 2012-13, the NGOs were Stri Shakti, Ekta Shakti Foundation, Surya Charitable Welfare Society, Maitree Research and Development Foundation, ISKON Food Relief Foundation, Jay Gee Humanitarian Society, Dalit Manav Uthathan Sanstha, Bharatiya Manav Kalyan Parishad, People Welfare Society, Trimurti Charitable Trust, Royal Education and Social Welfare Society, Jan Chetna Jagriti and Shikshanik Vikas, B R Ambedkar Dalit Utthan Evom Shiksha Sansthan, Bal Vikas Evom Paryavaran Sanrakshan Sansthan, Indcare Trust, Suprabhat Education and Social Welfare Society, Akshaya Patra Foundation, and Manjeet Caterers.
- The Delhi Cantonment Board (DCB) provides MDMS in only six schools of its jurisdiction in Delhi.
- The nutritional norms were provided by the MHRD in reply to RTI no F No 6-11/2013-EE 5 (MDM-1-2) on 2 April 2013, available at <http://mdm.nic.in/>
- These are all north Indian dishes. Puri is made from grain flour generally wheat flour (*atta*) by deep frying in vegetable oil and *besan* is flour of gram. Chhole is boiled white gram with spices and gravy. Dal is made from boiling pulses and adding salt and coriander powder, while *sambhar* contains vegetables and spices. *Kadhi* is a salty-sour dish made from curd or butter milk. Halwa is a sweet dish made from suji, a wheat product, *channa* is black gram, and *rajma* is red bean.
- The copies of the orders issued in 2009 and 2010 were provided by the MDM Cell, DOE. Also available at http://www.edudel.nic.in/welcome_folder/mid_day_meal_main.htm
- The Times of India* (2013): "Despite Serving Bad Food NGOs Keep Job", New Delhi, 9 April, p 2.
- The agreements were shown by the MDM Cell, DOE, on request. A sample copy is available at http://www.edudel.nic.in/welcome_folder/mid_day_meal_main.htm
- Reply to RTI no DE/RTI/ID No 14153/2012/1750, 27 February 2013.
- The Hindu* (2013): "83% Mid Day Meal Fail the Lab Test", New Delhi, 22 March, p 2.
- Millennium Post* (2013): "How NGOs Are Risking Lives of 12.97 Lakh Students", 4 March, available at <http://www.millenniumpost.in/NewsContent.aspx?NID=22212>; and "Civic Bodies, LG Rush to Renew Testing of Mid Day Meal Samples", 6 March.
- Hindustan Times* (2013): "Delhi Kids Served Untested Mid Day Meals for Five Months", 7 March, available at <http://www.hindustantimes.com/India-news/NewDelhi/Delhi-Kids-served-untested-meals-for-five-months/Article1-1022390.aspx>
- Millennium Post* (2012): "Poor Students Go Half-fed, as 'Fake' NGOs Steal Meals", 22 October, available at <http://www.millenniumpost.in/NewsContent.aspx?NID=11357>
- A research institute or university is appointed as the monitoring institute (MI) by the MHRD for independent monitoring of the MDMS in each state/union territory. The MI presents its report to the PAB-MDMS in its annual review.
- Minutes of meeting (MOM) of PAB-MDM on 3 April 2012 and 11 April 2013. Available at <http://mdm.nic.in/>
- PAB-MDM (2012-13, 2013-14): See MOM pdf and MI ppt (critical points), available at <http://mdm.nic.in/>
- MOM of PAB-MDMS on 3 April 2012, p 6.
- Shahdara South Zone of East DMC in reply to RTI no D/12162/ADE/SH (S) on 1 Feb 2013 revealed Stri Shakti has a contract with Sanjay Flour Mill, I-150, Bawana Industrial Area, Delhi-39. However, other agencies denied the information. The NP-NSPE guidelines say, "The NGOs shall not subcontract the programme or divert any part of assistance (foodgrains/money) to any other organisation".
- NP-NSPE (2006) mandates the Food Corporation of India (FCI) to supply the best quality grains for the MDMS. "FCI Will Issue Foodgrains of Best Available Quality, Which Will in Any Case Be at Least of Fair Average Quality (FAQ)" (NP-NSPE 2006: 16).
- Additional secretary, MHRD, Amarjit Singh, taking cognisance of media reports on the MDMS on 11 April 2013 remarked, "It is desirable that the actual weight of cooked food for different recipes is worked out. ...The raw ingredients are taken as per norms prescribed by MHRD, the recipe is prepared and actual weight of the cooked food/child is worked out for each of the weekly menus". The instructions have not been implemented in Delhi so far.
- Millennium Post* (2012): "So, Why Do NGOs Lobby Hard for Mid-Day Meal Contracts?" 26 October, available at <http://www.millenniumpost.in/NewsContent.aspx?NID=11820>.
- All accounts, stocks, registers maintained by the NGOs should be open to inspection by designated government officers (NP-PSPE 2006, *Guidelines*, pp 17-21).
- PAB-MDM (2012), "MOM (Availability and Utilisation of Food Grain)", 3 April, p 3, available at <http://mdm.nic.in/>. See also "Rich and Powerful Use NGOs to Steal MCD Students' Food", 23 October, at <http://www.millenniumpost.in/NewsContent.aspx?NID=11459>.
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