

CHAPTER 1

JOINT REVIEW MISSION

Composition and Terms of Reference (TOR)

Mid Day Meal, as a public welfare concept in India dates back to 1925 when such a project was launched for the underprivileged children in the then Madras Corporation.

Nutrition and Health are pre-requisites for human resource development. Our planners have been aware of these vital inputs and enshrined it in article 47 of the constitution." The State shall regard raising the level of nutrition and standard of living of its people and improvement in public health among its primary duties."

The Mid- Day Meal (MDM) Scheme is a flagship programme of the Government of India having the distinction of being the largest school feeding programme in the world reaching out to about 10.46 crores children in 12 lakh primary and upper primary schools (Government, Government Aided and Local bodies), Education Guarantee Scheme (EGS) / Alternative Innovative Education (AIE) centres and Madarsa and Maqtabas supported under Sarva Shiksha Abhiyan (SSA) as well as National Child Labour Project (NCLP) schools. In drought-affected areas MDM is served during summer vacation also. A programme of scale and magnitude of Mid Day Meal requires close monitoring and evaluation at all levels. In 2010, the Central Government (M/o Human Resource Development) decided to review implementation of the programme in all its aspects through the Review Missions, which are also to provide suggestions for improvement.

It is an incontrovertible fact that school meal programmes exert a positive influence on enrolment and attendance in schools. A hungry child is less likely to attend school regularly. Hunger drains them of their will and ability to learn. Chronic hunger can lead to malnutrition and also delays or stops the physical and mental growth of children. Poor or insufficient nutrition over time means that children are too small for their age, and susceptible to diseases like measles or dysentery, which can be fatal for the malnourished children.

There is also evidence to suggest that apart from enhancing school attendance and child nutrition, mid day meals have an important social value and foster equality. As children learn to sit together and share a common meal, one can expect some erosion of caste prejudices and class inequality. Further the cultural traditions and social structures often indicate that girls are much more affected by hunger than boys. Thus, the mid day meal programme can also reduce the gender gap in education, since it enhances girl child's school attendance.

Role of Nutrition in promoting Health and Wellbeing

Nutrition, the focal point for health and well-being. Nutrition is directly linked to human resource development, productivity and ultimately to the nation's growth. The Mid day meals are instrumental in curbing the classroom hunger and promoting education.

Malnutrition on the other hand is a complex phenomenon. It is both the cause and effect of poverty and ill health: and follows a cyclical, inter-generational pattern. It is inextricably linked with illiteracy, especially female illiteracy, lack of safe drinking water, sanitation, ignorance, lack of awareness and ill health. It creates its own cycle within the large cycle of poverty.

Malnutrition adversely affects Universalization of Elementary Education (UEE). Even if a malnourished child does attend school, he/she finds it difficult to concentrate on and participate in the learning activities in school. Unable to cope, the child would very often drop out of school.

According to Pollitt et al (1996) absence of an adequate breakfast over extended period can affect both behavior and nutritional status; such children exhibit irritability, decreased attentiveness and low concentration span, all of which affect their active learning capacity (ALC).

Malnutrition is not just an issue for the nutritionist; the planners and economists also need to recognize that the cost of malnutrition is much greater than the investments required to end hunger/malnutrition (Singh 2004).

According to Amartya Sen (2001), Indian children/women suffer not only from educational neglect but also from under nourishment on a scale that makes India a world leader in an unenviable role ; the of mid-day meals/ supplementary feeding programmes can be effective in jointly addressing several pivotal problems .

In a bid to boost the UEE by increasing enrollment, attendance coupled with reduction of absenteeism and simultaneously to improve the nutritional status of children in primary classes; National Programme of Nutritional support to Primary Education (NP NSPE) , popularly known as the Mid Day Meal Scheme was launched on 15th August 1995.

Subsequent to landmark intervention by the Supreme Court of India directive was given making it mandatory for the state governments to provide cooked meals instead of dry rations.

James Grant, (UNICEF, 1995) commented that though micronutrient deficiency does not produce hunger but gnaws the core of the health. Most of its consequences are not readily perceived; like the ice berg, its' bulk lies beneath the surface.”

Joint Review Mission – Team Members

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Co-Team Members

- 1- **Ms Nayera Masoodi**, Research Assistant
- 2- **Ms Swati Jain**, Research Assistant

The Mission comprising of the above mentioned members visited various schools and centralized kitchens under all the implementing agencies i.e., Directorate of Education, DMC(North, East & South), NDMC and Delhi Cantonment Board covering 6 districts of the Delhi.

The Terms of Reference for the Review Mission were as under:

- (i) Review the system of fund flow from State Government to Schools/cooking agency and the time taken in this process.
- (ii) Review the management and monitoring of the scheme from State to School level.
- (iii) Review the implementation of the scheme with reference to availability of food grains, quality of MDM, regularity in serving MDM as per approved norms and mode of cooking.
- (iv) Role of Teachers
- (v) Convergence with School Health Programme (SHP) for supplementation of micronutrients and health check- ups and supply of spectacles to children suffering from refractive errors.
- (vi) Creation of capital assets through kitchen-cum-store/kitchen devices

- (vii) Appointment of Cook-cum-Helpers for preparation and serving of meal to the children
- (viii) Availability of dedicated staff for MDM at various levels
- (ix) Review the maintenance of records at the level of school/cooking agency.
- (x) Review the availability of infrastructure, its adequacy and source of funding.
- (xi) Review of payment of cost of food grains to FCI by the districts
- (xii) Review the involvement of NGOs/Trust/Centralized kitchens by States/UTs Government in implementation of the Scheme.
- (xiii) Management Information System (MIS) from school to block, district and State Level to collect the information and disseminate it to other stakeholders
- (xiv) Assess the involvement of Community' in implementation of MDM scheme

Terms of Reference (ToR) for Nutritional Status:

1. To assess the anthropometric measurements of a sample of children availing MDM
 - i. Height
 - ii. Weight
 - iii. Mid arm Circumference
2. To Calculate the Body Mass Index (BMI) on the basis of measurement of Height and weight.
3. To identify the children who are undernourished and over nourished.
4. To assess the nutritive value of the served MDM on the day of visit by 24 hour food recall method.
5. To review the quality and quantity of the served MDM.
6. To review the satisfaction of the children parents and community on the served meal under MDM in respect of quality and quantity.
7. To suggest some nutritionally balance region specific recipes.
8. To assess the ways for better convergence with School Health Programme

The food and Nutrition norms through the years under MDM:

Initially the programme envisaged the provision of free of cost 100g of wheat /rice for children studying in classes I-V in all Government, local body and Government aided primary schools. The central government provided wheat /rice to the states; 3 kg of cereals were to be distributed free of cost to children who had over 80% attendance in the previous month. Most of the states distributed food grains to children but some states who were earlier providing cooked mid day meal or ready to eat food to school children, continued to do so.

In 2001 Hon'ble Supreme Court of India ruled that MDM is a legal entitlement for all children and that the government should provide a hot cooked mid day meal containing 300kcal energy and 12 g of protein/day for 200 days to all children studying in classes I-V in all government, local body and government aided primary schools .

In 2006, Department of Primary Education constituted an Expert Committee to review the content and quantity of ingredients to be provided through the MDM. The expert committee recommended that MDM should provide hot cooked meal containing 100g of cereals, 20g of pulses.

Table 1: Revision of food norm w.e.f. 1.12.2009

Nutritional content	Norm as per NP-NSPE,2004	Revised norm as per NP- NSPE,2006
Calories	300	450
Protein	8-12 g	120
Micro – nutrients	Not prescribed	Adequate quantities of Micro nutrients like Iron, folic Acid and Vitamin A

Food norms have been revised to ensure balanced and nutritious diet to children of 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

Nutrition Content under MDMS: At present

- a) 450 kcal and 12g of protein which is derived from 100 g of food grains (rice/wheat), 20g of pulses , 50g of vegetables and 5g of oil for children studying in primary classes and
- b) 700 kcal and 20g of protein, which is derived from 150g of food grains (rice/wheat), 30g of pulses , 75g of vegetables and 7.5g of oil in upper primary classes.

Table 2: Quantity of Ingredients

S. No.	Items	Quantity per Child per Day	
		Primary	Upper Primary
1.	Food grains	100 g	150 g
2.	Pulse	20 g	30 g
3.	Vegetables (leafy also)	50 g	75 g
4.	Oil & fat	5 g	7.5 g
5.	Salt & Condiments	As per need	As per need

NATIONAL CAPITAL TERRITORY OF DELHI: AN INTRODUCTION

Delhi, officially the National Capital Territory of Delhi (NCT), is the capital region of India which includes the national capital city, New Delhi. It is the second most populous metropolis in India after Mumbai and the largest city in terms of area. With a population of 22 million in 2011, the city is also the fourth most populous metropolis in the world.

In Delhi, cooked Mid-Day Meal is provided to all children studying in all schools run/aided by different agencies i.e. Directorate of Education, North Delhi Municipal Corporation, South Delhi Municipal Corporation, East Delhi Municipal Corporation, New Delhi Municipal Council and Delhi Cantonment Board through 46 centralised outsourced kitchens.

Although technically a federally administered union territory, presently the political administration of the NCT of Delhi today more closely resembles that of a state of India with its own legislature, high court and an executive council of ministers headed by a Chief Minister. New Delhi is jointly administered by the federal Government of India and the local Government of Delhi, and is the capital of the NCT of Delhi.

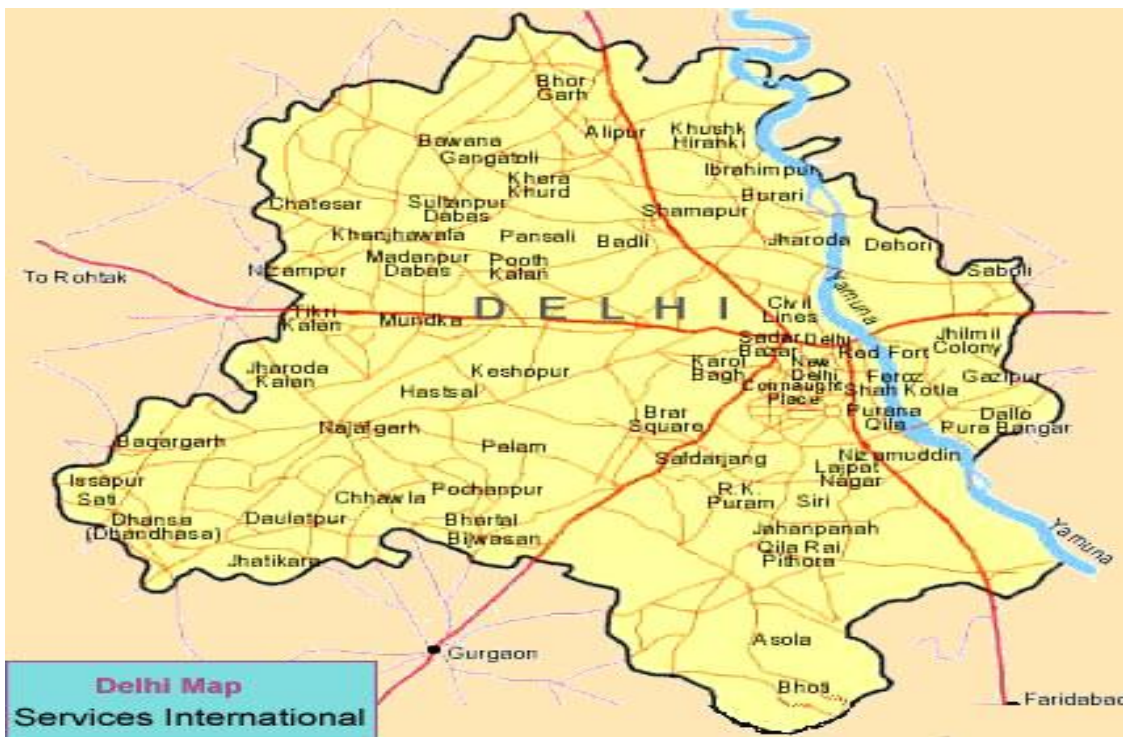


Plate 1: **Map of Delhi**

National Capital Territory of Delhi comprises of nine revenue districts, 27 tehsils, 59 census towns, 300 villages, and three statutory bodies, the Municipal Corporation of

Delhi (MCD) – 1,397.3 km², the New Delhi Municipal Council (NDMC) – 42.7 km² or 16 sq miles and the Delhi Cantonment Board (DCB) – 43 km² or 17 sq miles).

The Delhi metropolitan area lies within the National Capital Territory of Delhi (NCT), which has five local municipal corporations; North Delhi Municipal Corporation, South Delhi Municipal Corporation, East Delhi Municipal Corporation, NDMC and DCB. The former MCD has been divided into three smaller Municipal Corporations – North Delhi, South Delhi and East Delhi. According to the 2011 census, MCD is among the largest municipal bodies in the world, providing civic services to about 11 million people.

CHAPTER: 2

IMPLEMENTATION OF MID DAY MEAL IN DELHI

In Delhi, cooked Mid-Day Meal is provided to all the children studying in all schools run/aided by different agencies i.e. Directorate of Education, North Delhi Municipal Corporation, South Delhi Municipal Corporation, East Delhi Municipal Corporation, New Delhi Municipal Council and Delhi Cantonment Board through 46 centralized outsourced kitchens.

(2.1) Implementation Agencies

The Department of Education, GNCT of Delhi the nodal department for implementation of MDM Programme in the State, which in coordination with East Delhi Municipal Corporation, South Delhi Municipal Corporation, North Delhi Municipal Corporation, NDMC and DCB implements the MDM Scheme in Delhi. The organization chart(Fig 1.) shown below indicates the implementation of the programme from State to School level through 46centralised kitchens. As per the existing agreement,preparation of food, its transportation to schools and distribution to students is the responsibility of NGOs; hence honorarium to cook cum helper has not been utilized in the State till now.

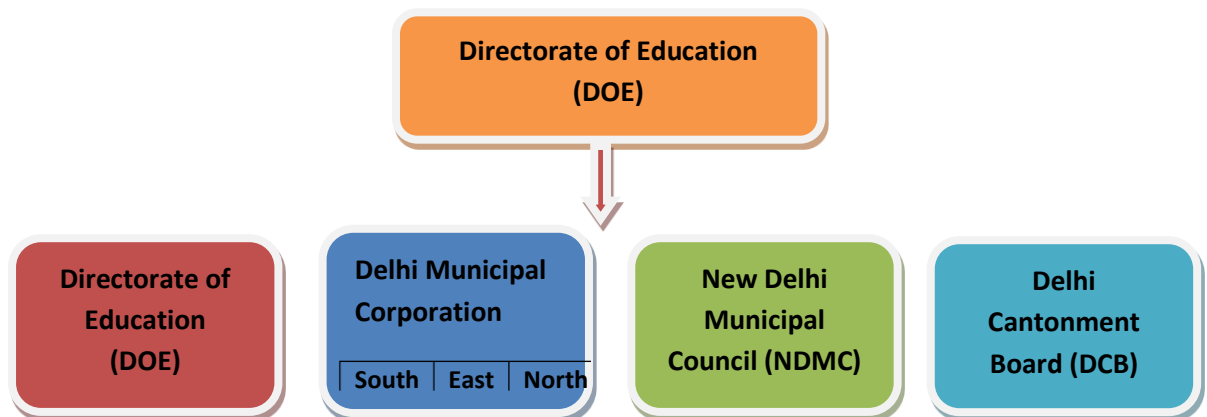


Fig.1: Organizational chart for the implementation of MDMS

(2.2) Fund Flow Mechanism

The Govt. of India released the ad-hoc grant of Rs. 28.20 crore on 09/05/2012 and Rs. 29.72 crore as balance of first installment on 19/07/2012. The State Government has reported that payment to NGOs is made on reimbursement basis and there is no delay in this process. However, the service providers informed that they generally received the funds after the delay of 2-3 months. It has been informed by the state that full payment to NGOs has been made up to the month of November, 2012.

Since December, 2012, only 50% payment has been made to NGOs as their cooked food samples could not meet the prescribed nutritional value under MDM. However, the test did certify that the food was fit for human consumption. Analysis of the food samples was carried out by Sri Ram Institute for Industrial Research, Delhi.

During the field visits to centralized kitchens, the NGOs requested the mission to advise the Govt. of GNCT of Delhi for early release of remaining payment as none of their samples were found to be unfit for human consumption and there was only a marginal difference in the nutritional norms.

The mission proposes that the payment should be regular without any delay and if there is any issue it needs to be resolved immediately.

The following flow chart indicates movement of funds from Central Govt. to the implementing agencies:

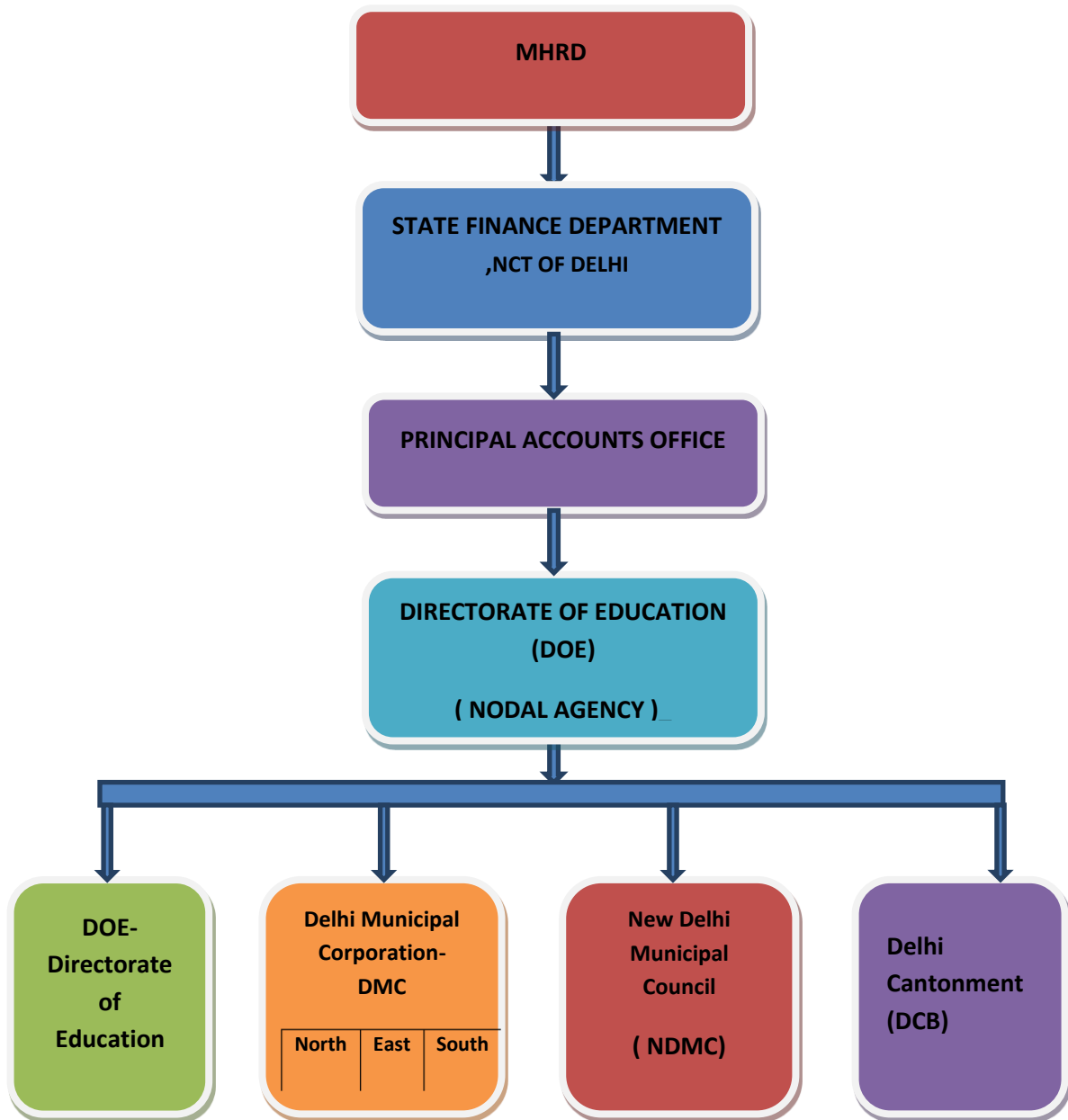


Fig. 2 : Fund flow to the implementing agencies.

(2.3) System for cooking, serving and supervising mid day meals in the school

Cooking, Serving and distribution of MDM in schools of Delhi is outsourced through NGOs/Service Providers from 46 Semi automated kitchens and as per

MOU/Agreement signed with them, cooking, transportation and serving is the responsibility of the NGOs.

As far as supervision of MDM in the schools to prevent any untoward happening is concerned, instructions are issued from time to time. Supervision/monitoring of Mid Day Meal is being done by the officers of the Department at the following level.

At the school level the monitoring of Mid Day Meal is being done at school level regularly by Head of the School/ Principal/Head Master and other members of the School Level Mid Day Meal Monitoring Committee (SLMDMMC) comprising of Head of the School, Teacher in charge of Mid Day Meal, Home Science Teacher, minimum three mothers of students, DDO of the school and one VKS member. The Head of School holds its meeting at least twice a month. This committee is fully responsible for receiving and monitoring the distribution of Mid Day Meal on daily basis. Other functions of the committee are as follows:-

- i) At least two committee members taste the food from all the containers before it is distributed among the students for consumption.
- ii) If the food is found to be stale or unfit for the consumption, it is not distributed and returned to the service provider.
- iii) The Head of the school has the right to take necessary action against the supplier as per agreement under intimation to EO,DDE and MDM Branch at Head Quarter.

At Zonal Level, a Zonal Level Steering cum Monitoring Committee of Mid Day Meal has been constituted in all zones comprising of Education officer of the zone, two Principals, two parents and one VKS member. Main functions of this committee are as follows:-

- i. To hold meetings to hold at least once a month.
- ii. To chalk out month wise programme of monitoring the distribution of Mid Day Meal in the schools of the concerned zone.

- iii. The Education officer monitors the programme and takes corrective steps as and when required.
- iv. Education Officer(EO) also visits the kitchens of the service providers at least once a week.

At District Level the District DDEs are entrusted with the following responsibilities:-

- i. To monitor/supervise working of the committee of Mid Day Meal at zonal and school level.
- ii. To visit the kitchens and supervise preparation and transportation of Mid Day Meal on regular basis.
- iii. To ensure that food is being prepared under hygienic conditions and all required infrastructure and machines are available in the kitchen.

At the Head quarter level, special committees are constituted as and when the need arises and inspections are done at kitchen and also at the school level.

(2.4) Physical and Financial Performance of the Scheme:

Given below is the coverage of primary and upper primary children as well as utilization of funds under MDMS.

(2.4.1) Coverage under MDMS Primary/Upper Primary school children:

- i. The details regarding enrolment and coverage of primary school children reveal that the coverage under MDMS had gone up slightly from 63% of the children enrolled children in 2010-11 to 68% during 2011-12. However, the coverage has gone down by nearly 2 % during the academic year 2012-13.

Table 3: Coverage of the MDMS: Primary Level (I-V)

Year	Enrolment	PAB approval	Avg. availed MDM	% Availed vs. Enrol.	% Availed vs PAB app.
2010-11	1169709	900000	731246	63%	81%
2011-12	1152596	900000	784768	68%	87%
2012-13	1161129	822000	767402	66%	93%

- ii. The trends for coverage of enrolled upper primary school children (VI-VIII) under MDMS are almost identical as these are for primary level. About 65% of the enrolled children have been covered under MDMS during the academic year 2012-13.

Table 4: Coverage of MDMS: Upper Primary (VI-VIII)

Year	Enrolment	PAB approval	Avg. availed MDM	% availed vs. Enrol.	% availed vs PAB app.
2010-11	662339	550000	419086	63%	76%
2011-12	668204	500000	448704	67%	90%
2012-13	713378	475000	461884	65%	97%

(2.4.2) Financial performance of the scheme:

Financial Performance of the scheme has been tracked from 2009 to 2010 and indicated that registered an increase from 2009-10 (60 %) to 2011-12 (87%) in the cooking cost while the Transportation cost increased from 2009-10 (14%) to 2011-12 (80%) . In Case of MME, there has been a drastic reduction from 76% (2009-10) to 24 % (2011-12) .

Table 5: Details of the fund availability and utilization from 2009-13 Rs. in Lakh

Year	2009-10		2010-11		2011-12		2012-13 as on 31.12.2012	
Component	Allocation	Exp.	Allocation	Exp.	Allocation	Exp.	Allocation	Exp.
Cooking Cost	6605.86	3974.55	9960.40	8278.36	10225.10	8877.61	10134.54	5873.73
Transportation Cost	310.90	43.26	277.88	163.99	265.50	213	247.03	69.46
MME	157.67	119.40	172.18	28.08	198.75	47.82	195.20	34.37

Table 6: Details of % Expenditure against Central Assistance

Component	2009-10	2010-11	2011-12	2012-13 as on 31.12.2012
Cooking Cost	60%	83%	87%	58%
Transportation Cost	14%	59%	80%	28%
MME	76%	16%	24%	18%

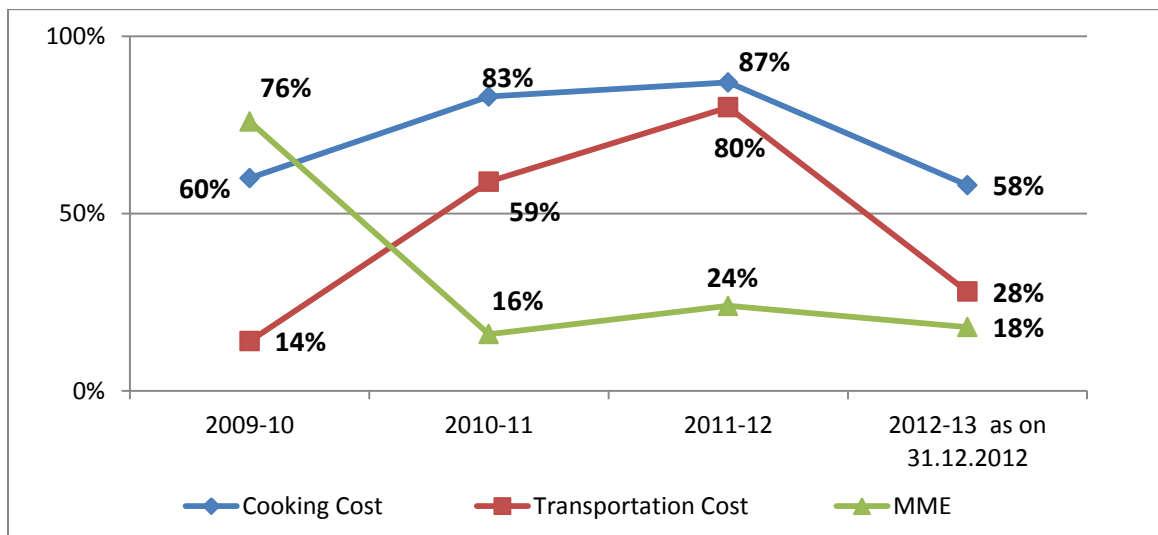


Figure 3: Utilization of Central Assistance against availability of Funds

CHAPTER 3

Methodology for Selection Sample Data Collection and Analysis:

The multi stage stratified random sampling has been used for selection of the NGO Run Kitchens, Schools and the children supplied MDM by units. The districts have been selected on the basis of performance of the Scheme during the last year.

The multistage stratified random sampling was used for selection of schools and service providers in the selected districts. 32 schools were visited out of which, at least 2 of the schools were supplied MDM by each of the implementing agencies spreading across 6 districts. The Review Mission followed a methodology to capture the intricacies involved in the implementation of the programme. In stead of selecting a large sample, the review mission emphasized for a greater in depth study to see the details in their entirety.

- i. The documents available with the implementing agencies were carefully studied and analyzed. Detailed discussions were held with State, District, Zone and School level functionaries
- ii. Interview with stakeholders, observations, focused group discussions and record based inquiry methodology was followed to capture the information on the performance of the scheme during the visits.
 - **Food Samples:** Food samples for each dish were taken randomly in duplicate from two different containers containing the mid day meal. Weight on serving portion of the cooked food items ($\pm 10g$) was noted separately for the 2 items served on the day (such as Puris and Dal separately& Sambhar and Chawal separately) .Further these food samples were subjected to sensory evaluation by the nutrition experts in the team . Nutrition experts also studied these food items to assess the approximate quantity of raw food items (per serving) going in the preparation such as rice, Atta, Dal, vegetables,fats etc. in to the preparation of these dishes.
 - Children from every school under study, five students (Ist to VIIIth) were randomly selected for gathering MDM related data and their anthropometric

measurements. Thus from each school 25 (Classes I-V) 15 (Classes VI-VIII) or 40 (I-VIII) children were randomly drawn for data collection.

iii. **Anthropometric measurements**

Nutrition anthropometry is one of the most important tool used for assessing the health and nutrition status of a population. The physical dimensions of the body are influenced by nutrition/ during the growing period of school age. Height and weight are the most commonly used anthropometric measurements. The related indices generally used to assess nutritional status of the children are height for age, weight for age and body mass index for age which are age and gender dependent.

Height was measured using a flexible but non-stretchable standardized measuring tape. It was recorded to the nearest ± 0.1 centimeters. Height was taken with the child standing erect on a flat surface without shoes, with his/her arms hanging naturally at the sides. The child held his head in a comfortably erect position, with the lower border of the eye in the same horizontal plane as the external auditory meatus. A scale was held over the child's head without much pressure in the sagittal plane (central part of head). The height was then converted to meters for calculating the body mass index (BMI).

The weight of children was taken on spring based electronic balance having an accuracy of ± 100 g. In order to obtain accurate results, an area in the classroom was selected which was away from the wall. The weighing scale was placed on a flat and even surface. Since it was not feasible, to take weight with minimal clothing, it was taken while the child was wearing the school uniform but without shoes. Each child was requested to stand straight i.e. without any support and not move while the reading was being noted.

Body mass index (BMI) or Quetlet's index is a statistical measure of the weight of a person scaled according to height (WHO, 2003). BMI is a reliable indicator of body fatness for most children. It was calculated by using weight and height data. The BMI values were compared with the international classification of BMI, as given by the World Health Organization for children aged five to eighteen years (WHO, 2007).

$$\text{BMI} = (\text{Weight in Kg}) / \text{Height (in m)}^2$$

Table 7: Nutritional Status Classification of Children According to Body Mass Index(WHO, 2007)

Classification	BMI (Principal cut off points)
Severe thinness	< minus 3SD
Mild thinness	< minus 2SD
Normal Range	+1 SD to -2 SD
Overweight	>+1SD
Obesity	>+ 2SD

- iv. From the Body full Data commonly used under nutrition indicators viz underweight, stunting and thinness have been employed to evaluate nutritional status of the children. Thus in the current analysis WAZ,HAZ& BAZ indices have been used.
- v. **Underweight:** A child, who is 15-20% below the normal weight for his age and height, is classified as underweight. Underweight reveals low body mass relative to chronological age which is influenced by both, height and weight of the child.
- vi. **Stunting:** According to World Health Organization stunting refers to insufficient gain of height relative to age (WHO, 1995). It is an indicator of chronic under nutrition and is the result of extended periods of inadequate food intake or increased morbidity or a combination of both.
- vii. **Thinness:** It is an indicator of acute under nutrition, the result of most recent food deprivation or illness (Bose et al, 2008). It is defined as body weight significantly below the weight expected of a child of same length or height.
- viii. **Evaluation of MDM**
 - **Temperature:** The temperature range in which food borne bacteria can grow is known as the **danger zone**. According to the 2009 U.S. Food and Drug Administration Food Code (2009), the danger zone is defined as 5^o and 57 °C (41 and 135 °F). However, other jurisdictions consider the danger zone between 5^o and 60 °C (41 and 140 °F). Microorganisms multiply at a fast pace when the food is kept at temperature between 5°C and 60°C which represents the danger zone. Therefore, all cooked food should be

refrigerated at temperatures below 4°C or hot food should be kept piping hot above 65°C. Temperature of each dish was taken with the help of a thermometer having an accuracy of $\pm 1^{\circ}\text{C}$. The temperature was noted in two different containers for each dish. The lid of containers was opened in the presence of JRM member just before noting the temperature of the food. To ensure hygiene and the thermometer was cleaned (using water & disinfectant) before and after each use.

- **Serving Size of Mid Day Meals:** The serving size of MDM on the day of visit was observed to determine the quantity of energy and nutrients present. The usual portion size being served to children on the day of visit was weighed on a spring balance having an accuracy of ± 10 grams. In order to minimize variation, two serving portions of each dish were weighed separately. The weight of plate or tiffin box etc. was subtracted from the total weight.
- **Sensory Evaluation of MDM:** The colour, texture, taste, flavor and mouth feel determine the acceptability of a meal. The mid day meal being served on the day of visit was evaluated for their sensory attributes such as thickness of poori or consistency of dal. The JRM members also conducted Qualitative sensory evaluation as and when possible.

The mission noted that the Govt. of Delhi has not engaged any of the 18740 cook-cum-helpers already approved by the Programme Approval Board under the MDMS. In Delhi, Mid-Day Meals are provided in all schools through Centralized kitchen and the service providers have engaged helpers in schools out of their own resources in schools for serving the meals to children. However, the JRM noted that number of these helpers was rather inadequate in the visited schools. Social composition of helpers was found satisfactory as all the helpers were from weaker sections of society. They, however, require training in hygiene and sanitation for properly discharging of their duties. Some of the Helpers reported that they received a meager amount of Rs. 500/- per month as cash remuneration. The mission was informed that the Govt. of Delhi is in the process of placing the approved number of cook-cum-helpers and that they will be engaged by June, 2013.

- Anthropometric measurements : Nutrition anthropology is one of the most important tool used for assessing the health and nutrition status of a population. The physical dimensions of the body are influenced by nutrition/ during the growing period of school age. Height and weight are the most commonly used anthropometric measurements. The related indices generally used to assess nutritional status of the children are height for age, weight for age and body mass index for age which are age and gender dependent.

ix. **Proposed Structure of MDMS in the State :**

Currently in Delhi Mid Day Meal Scheme is implemented through different agencies i.e. Directorate of Education, North Delhi Municipal Corporation, South Delhi Municipal Corporation, East Delhi Municipal Corporation, New Delhi Municipal Council and Delhi Cantonment Board. Department of Education the nodal agency for MDMS is headed by Secretary (Education), GNCT of Delhi who is assisted by the Director Education. At present there are no dedicated Officers for Mid Day Meal Scheme at the district and State level.

A separate Mid Day Meal Cell has been setup at the State level but at the district level there, is no separate cell or any dedicated staff for MDMS. The Deputy Director (Education), is in-charge of the programme at the district level and at the zonal level Education officer is looking after the programme.

The Review Mission noted that none of the Additional Director/ Deputy Director has been exclusively assigned at Directorate level to look after the MDMS. Also there is no regular official at district and block level to look after MDMS at district and block levels.

The Review Mission proposes and recommends that a mid day meal authority headed by Director who is assisted by other officials may be set up on the pattern of Uttar Pradesh, Rajasthan etc.

x. Distribution of MDM :

The mission noted that the Govt. of Delhi has not engaged any of the 18740 cook-cum-helpers already approved by the Programme Approval Board under the MDMS. In Delhi, Mid-Day Meals are provided in all schools through Centralized kitchen and the service providers have engaged helpers in schools out of their own resources in schools for serving the meals to children. However, the JRM noted that number of these helpers was rather inadequate in the visited schools. Social composition of helpers was found satisfactory as all the helpers were from weaker sections of society. They, however, require training in hygiene and sanitation for properly discharging of their duties. Some of the Helpers reported that they received a meager amount of Rs. 500/- per month as cash remuneration.

The mission was informed that the Govt. of Delhi is in the process of placing the approved number of cook-cum-helpers and they will be engaged by June, 2013.

The mission strongly recommends that since service providers have already engaged helpers, the State may assign the responsibility of engaging the approved number of cook-cum-helpers for cooking and serving the mid-day meal to children as per the norms under MDMS to the respective NGOs. This would make the NGOs own up total responsibility regarding the quantity and quality of MDM served to the children rather than shifting the responsibility on the helpers.

xi. Management Information System (MIS)

The Review Mission noted that online Management Information System (MIS) is operational wef 2011-12. As per this system, all the Government schools under Directorate of Education are required to submit daily online information about the number of students enrolled, number of present and the number of students who have taken Mid Day Meal in the school. Thus the Department gets the information regarding the number of meals supplied in the schools on the same day along with the list of defaulter schools that have not filled in this online information in the stipulated module.

In this way the information is available to all the officers at the Zonal, District and Head Quarter level which helps in monitoring the supply of Mid Day Meal in the Schools. However, it was noted that the requisite information is not being fed in to the system on daily basis by most of the schools. It was also noticed that whatever information is fed is also not utilized properly as there were very few inspections made by the officials.

The ministry of HRD has launched a web based MIS for Mid Day Meal Scheme . In this regard Delhi State has performed very poorly on the data entry aspect of MDM-MIS. The mission observed that annual data entry been completed only for 67% institutions, monthly data entry been completed merely by 14% schools, for the month of March, 2013. Even for the month of April, 2012 monthly data had been entered only for 61% institutions: and for March 2013 merely by 14%.

The mission strongly recommends that the State needs to urgently set up the mechanism for timely completion of data entry in the MDM-MIS.

Status of Annual Data Entry (April 2012-March 2013)

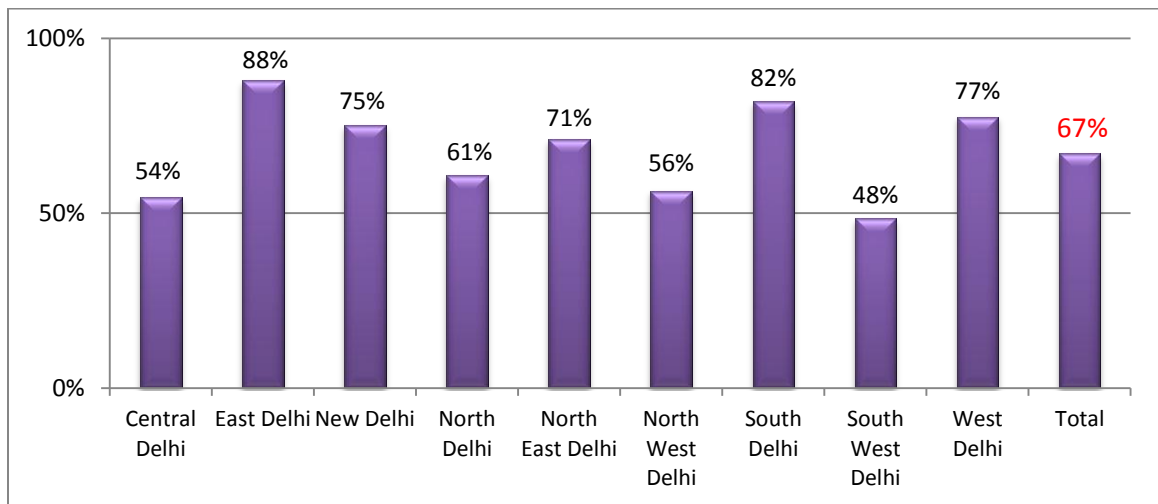


Figure 4: Status of Annual Data Entry

Status of Monthly Data Entry: (April 2012-March 2013)

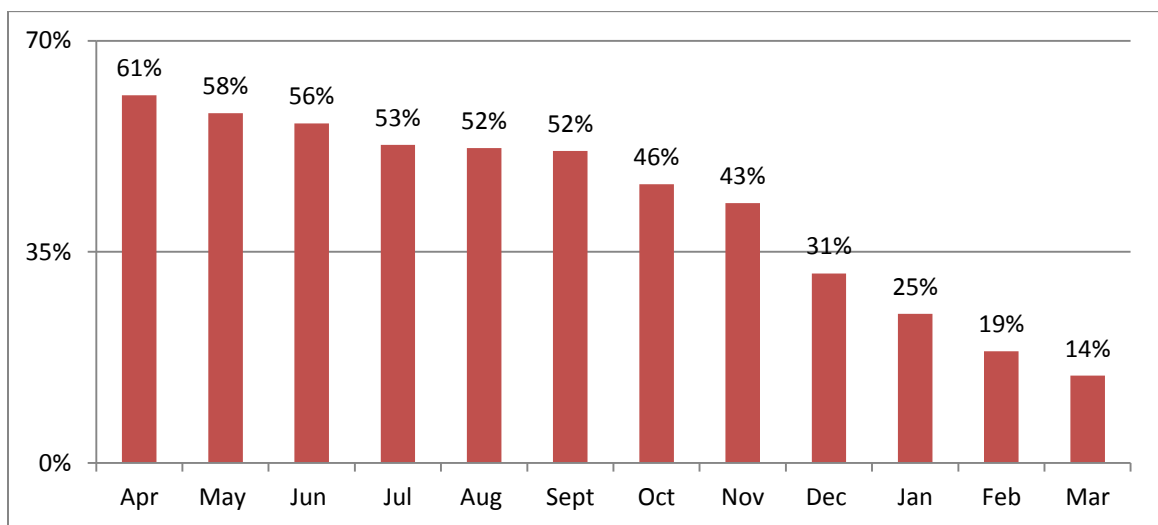


Figure 5: Status of Monthly Data Entry

Food grains management and payment of foodgrain cost to FCI

Food grain is released to the NGOs/Service Providers in advance. Food grain is lifted from FCI and transported to the kitchen godown by the NGOs through their own means of transportation. As per the MHRD norms the Government of NCT of Delhi reimburses transportation bills @Rs.750/-per MT as a whole or actual expenditure

whichever is less for food grain lifted and transported under Mid Day Meal scheme as per norms of MHRD.

The Mission noted that the new service providers who have been engaged to serve MDM wef 1st April, 2013, have yet not received the food grains from FCI as department has not provided them the allocation challan for lifting of food grains. However, the quality of food grains available at the kitchens was satisfactory.

The allocation of food grains received from MHRD is distributed among all implanting agencies according to its enrolment and then proposal of the Central Assistance for the cost of food grains is sent to Finance Department of GNCT Delhi through Planning Branch of Directorate of Education and after getting approval of the same from Finance Department, the Nodal Department (Directorate of Education) releases the same to the other implementing agencies according to their enrolment. Thereafter, the implementing agencies make payment to FCI against their bills of food grains through RTGS.

The mission was informed that entire payment has been made to FCI against the bills raised by FCI up to the month of March, 2013.

Infrastructure:

- i) School building: All the school buildings were found to be in good condition except in the case of Zeenat Mahal school at Kamla market, where the building needs repair and the chairs and benches also needs to be changed.
- ii) Fire extinguisher: Fire Extinguishers are available in all the schools.
- iii) Drinking water facility: All the schools visited have arrangement of potable water but quality needs to be periodically checked.
- iv) Toilet facilities: Almost all the schools have separate toilets for girl students. The cleanliness of the toilets was miserably poor in almost all the schools. Even water supply in the toilets was very poor.

School Health Programme:

The MDMS guidelines envisage that necessary interventions like regular health checkups, provision for de-worming tablets and supplementation of micronutrients like Vitamin 'A' dosage and IFA tablets are to be provided in convergence with the National Rural Health Mission (NRHM) of Ministry of Health & Family Welfare.

The Joint Review Mission noted that although doctors are visiting the DOE schools under Chacha Nehru Health scheme but the children except in Delhi schools under Cantonment Board, are not provided with IFA tablets or Vitamin 'A' dosage. Only de-worming tablets are provided to children that too once in a year. No health cards were being maintained in DOE, MCD or NDMC schools. However the health registers were maintained in MCD schools visited by the JRM.

The Joint Review Mission recommends that the BMI of the children should be taken regularly on annual basis and the malnourished children should be identified and necessary corrective action be taken.

The mission further stressed and recommends that urgent action be taken for a greater convergence and effective implementation of the School Health Programme so that children could receive vitamin A supplementation as well as IFA as per schedule and their periodic health check ups ,necessary referrals and timely corrective measures are taken to improve nutrition and health status of our school children.

Given below is a comparative analysis of the status of the implementation of the MDMS in the schools of Delhi vis-à-vis the guidelines suggested by the Directorate of Education.

Table 8: COMPARATIVE TABLE MDM Guidelines by the Directorate of Education, Government of the National Capital Territory of Delhi AND field observations by the Review Mission

Sr. No	Guidelines for implementation of MDMS – Dept. of Education	FIELD Observations by the JRM
1)	Proper record of the MDM should be maintained by the HOS/In-charge of Mid Day Meal in the school on daily basis regarding the quantity and quality of Meal received, the number of student not consuming the meal, name of the persons who tasted the food before the committee	<p>Computerised meal card was available in all the DoE schools, but most of them were not completed on daily basis. the data could not be authenticated to cross check the records of enrolled as those taking MDM on every day basis. The charts show cent percent data of MDM intake. Two schools under the Delhi Cantonment Board visited by the JRM team found that the records were concocted.</p> <p>The school surveyed do not maintain any record of the food received from the supplier on day-to-day basis and record the total quantity of food received, viz. to enable computation of the children present and the food supplied in accordance with the standard MDM cooked weight of MDM being supplied.</p>
2)	School Mid Day Meal Committee	The mission observed that there are no discussions on the MDM subject. In

	<p>shall be formed comprising of:</p> <ol style="list-style-type: none"> a. Head of teacher b. Teacher-in-charge c. Home Science Teacher d. Minimum three mothers e. DDO of the school f. One VKS member <p>The Committee shall be fully responsible in monitoring the distribution of Mid Day Meal</p>	<p>some of MCD schools SMC (School Management Committee) is not constituted. The record maintenance is also very poor especially in DOE schools.</p>
3)	<p>All schools shall display the menu of MDM on notice boards. Ensured that every child wash his hands before taking the meal</p>	<p>The MDM logo was not displayed in most of the schools.</p>
4)	<p>Every school shall maintain registers regarding comments of DDEs/Eos/community participation and mother's committee</p>	<p>All schools visited either did not have a feedback register or the register was incomplete.</p>
5)	<p>Copy of the reports of the laboratory of any of the sample testing shall be attached with the Bills while presenting to the PAO for payments</p>	<p>Sample results of MDM food tested by the laboratory are not being shared with the school authorities and the food suppliers. The DCB schools reported no lab testing was being</p>

		done on the samples.
6)	The EOs shall visit each of the schools at least once a month at the time of distribution of MDM	No record could be retrieved to determine the frequency of the visits and the feedback in all the visited schools.
7)	DDEs will examine the complaints received in r/o. Mid Day Meal Parents, NGOs, School Authorities or EOs and resolve the intimation to the headquarter.	All complaints are addressed telephonically and no written records could be found.
8)	The MME funds should be used at the school level for purchasing stationary, sanitary item like soap, dustbin, mats for seating arrangements	MME funds yet not released to the MCD and DCB schools The register detailing the utilisation of the funds have also not been maintained in 70 per cent of the schools visited.
9)	Support of community members including Mothers, Group Solicited to ensure that children wash their hands with soap, clean plates and glasses, avoiding littering and wastage of food and rinse their hands and mouth after eating.	Almost nil community participation in the scheme as per the available records and teachers perception.
10)	The quantity and quality of the cooked Mid Day Meal shall conform to the prescribed standard which is as follows: a) Food for Primary classes to contain a food value of minimum	The students were generally satisfied with the quality and quantity of the mid day meal. They however, expressed particular liking towards Rice-Rajma, Rice – Kadhi, and puri – aloo sbji. The most disliked menu is

	<p>450 kcal and 12g of protein per meal.</p> <p>b) Food for Upper Primary classes to contain a food value of minimum 700 kcal and 20g of protein per meal. The quantity of rice menu for Primary and Upper Primary classes shall be 250g and 275g, respectively while the quantity of wheat menu for Primary and Upper Primary classes shall be 200g and 250g, respectively.</p>	<p>halwa – chana, majority of the students suggested replacing halwa – chana with Rice – Rajma or with vegetable pulao.</p> <p>There are also instances of children not liking the food on particular day. Some of the children did mention of their dissatisfaction with rt the quantity / number of puri served as they were demanding more puris which were not given to them .</p>
11)	<p>All the implementing agencies will ensure that weighing machines should be available in all schools under the jurisdiction for weighing the meals in all schools under their jurisdiction for weighing the meals supplied delivery/ supply of MDM in required quantity as per the norms.</p>	<p>Weighing machines were available in all the MCD and NDMC schools visited.</p>
12)	<p>All the implementing agencies will ensure that all NGOs responsible</p>	<p>No record of the findings of the kitchen/ school level inspections could</p>

	for the supply of cooked food under the scheme main standards of hygiene and health through licensing under the Corporation act and strict adherence to the strict adherence to the scheme prescribed guidelines.	be found.
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The mission recommends all the implementing agencies should stringently follow the guidelines laid down by the DoE and help in making the MDMS in Delhi better and a model for the other states.

CHAPTER 4

MDMS Guidelines viz JRM Observations and Recommendations

4.1 Mid Day Meals

a) Mid Day Meal Consumption Pattern

Mid day meal consumption were observed for 313 students. It was noted that majority of students (72.8%; n=228) were consuming their entire mid day meal (Table 9 and Figure 6). The trend for consumption of complete meals was found to be almost same for girls and boys across all schools. District wise data indicated that 91.1%, 61.3%, 30.8%, 86.4 %, 73.1% and 100 % children from central, south, east, south-west, New Delhi and west Delhi respectively consumed complete mid day meals serving (Table 10). Maximum number of children who consumed complete mid day meals was from Sarvodaya Kanya Vidhalaya, Haveli Azam Khan, Asaf Ali Road, Sarvodaya Kanya Vidhalaya, Nariana and Government Sarvodaya Kanya Vidhalaya , and Paschim Vihar etc.. The food in these schools was being supplied by Ujwal Savera, Surya charitable Trust, Maitri, Rewards and Stri Shakti. Generally, leftovers were not found in the tiffins/plates of children. This could be because in majority of schools the serving size varied upon the request of child. Further study needs to be carried out to know the reasons for complete consumption of meal such as level of hunger, worm infestation, liking for food etc.

Table 9: Gender Wise Data on Practice of Consuming whole portion of Mid-Day Meal

Category	Boys n (%)	Girls n (%)	Pooled Data n (%)
Yes	99 (72.3)	129 (73.3)	228 (72.8)
Sometimes	22 (16.1)	39 (22.2)	61 (19.5)
No	16 (11.7)	8 (4.5)	24 (7.7)
Total	176 (100)	137 (100)	313 (100)

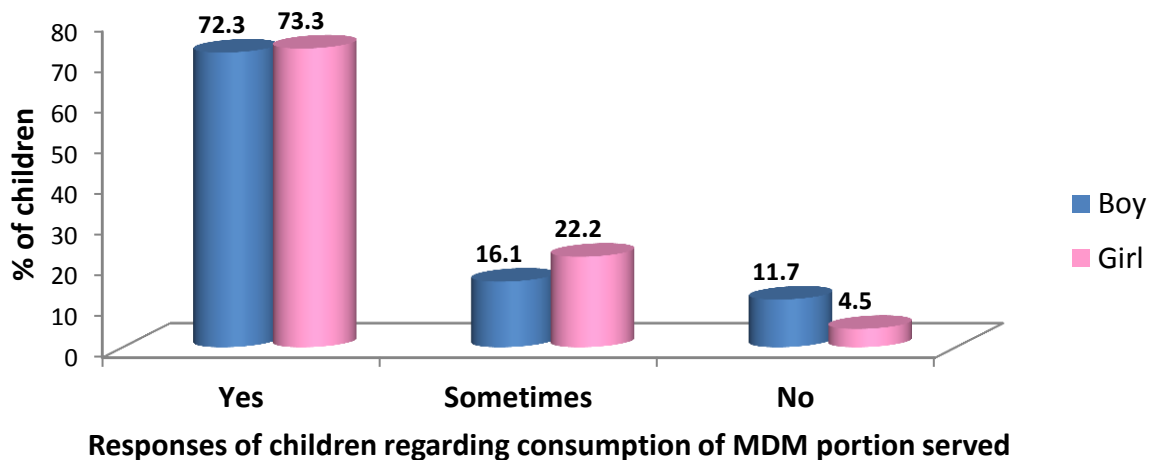


Figure 6: Mid day meal consumption pattern

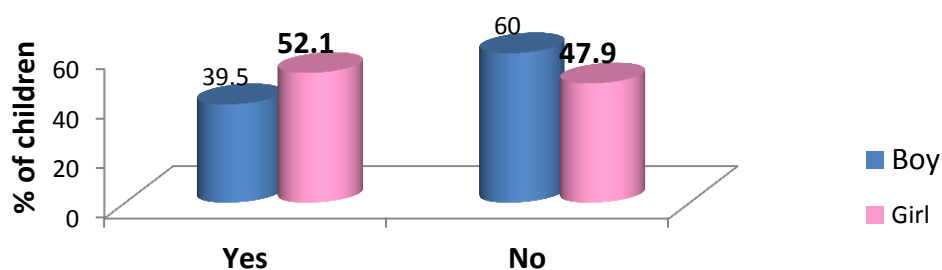
Table 10: District Wise Data on Practice of Consuming whole portion of Mid-Day Meal

Category	Central Delhi	South Delhi	East Delhi	South West Delhi	New Delhi	West Delhi	Pooled Data n (%)
Yes	72 (91.1)	46 (61.3)	12 (30.8)	51 (86.4)	38 (73.1)	9 (100)	228(72.8)
Sometimes	4 (5.1)	14 (18.7)	26 (66.7)	6 (10.2)	11 (21.2)	0 (0.0)	61 (19.5)
No	3 (3.8)	15 (20.0)	1 (2.6)	2 (3.4)	3 (5.8)	0 (0.0)	24 (7.7)
Total	79 (100.0)	75 (100.0)	39 (100.0)	59(100.0)	52 (100.0)	9 (100.0)	313(100.0)

Data indicate that nearly half of the children preferred to consume an extra portion of meal. It was found that greater number of girls demanded an extra portion as compared to the boys (Table 11 and Figure 7). Gender bias and the resultant poor accessibility to food to girl child could be the reasons for increased demand of mid day meal by the girl children. Thus, the mid day meal perhaps making significant positive contribution to the daily diets of children, particularly girls.

Table 11: Gender Wise Data on Practice of Demanding Extra Portion of Mid-Day Meal

Category	Boys n (%)	Girls n (%)	Pooled Data n (%)
Yes	69 (39.5)	74 (52.1)	143 (45.1)
No	106 (60.0)	68 (47.9)	174 (54.9)
Total	175 (100)	142 (100)	317 (100)



Response of Children regarding demand for an extra portion of MDM

Figure 7: Demand for extra portion of mid day meal

b) Temperature of Food:

Appropriate temperature of the cooked food from the time of delivery to transfer and consumption is crucial for containing microbial growth. Therefore, during the JRM visit, the temperature of food was noted, the exercise could be carried out in seven schools. The temperature of food items (n=14) ranged between 26^oC to 69^oC; in case of six dishes it was above 60^oC. The temperature of cereal based dishes was considerably lower than of pulse or vegetable based dishes. Foodborne microorganisms grow much faster in the middle of the danger zone (5 to 60^oC) i.e. at temperatures between 21 and 47 °C (70 and 117 °F). In order to prevent foodborne illness potentially hazardous food should not be stored in this temperatures range. Further, the food that remains in the danger zone for more than two hours should not be consumed. Clostridium perfringens and Bacillus cereus grow very rapidly in food in the danger zone and cause different illnesses.

Foods that have been exposed to the growth of microorganisms can cause a flu-like illness, often referred to as food poisoning. Some of the symptoms include stomach cramps, nausea, vomiting, diarrhea, and fever. Food-borne illnesses become more dangerous for young children particularly with weakened immune systems, emphasizing that following the proper handling of food is of particular importance. The symptoms of food-borne illness, or “food poisoning,” can begin shortly after, or in some cases weeks after eating the contaminated food. This highlights the need to adopt proper food handling practices particularly in programmes like the MDMS where large number of children are being catered to. The MDM in-charge must therefore record the temperature of the mid day meal at the time of receiving. Since hot cooked foods are served, the temperature at the time of receiving/distribution should be above 65°C.

c) Sensory Evaluation of MDM

The colour, texture, taste, flavor and mouth feel determine the acceptability of a meal. Salient observations indicated that the texture of rice was not satisfactory and the consistency of dal was fairly thin in most samples. The sensory characteristics of bengal gram and horse gram channa was satisfactory in most schools.

d) Serving Size of Mid Day Meals

The serving size of mid day meals served, did not vary for children studying in primary and upper primary classes in majority of schools. The average cooked weight being served was:

Rice = 121 g	Poori = 54 g	Sabzi (aloo) = 60 g	
Chole = 100 g	Channa = 64 g	Halwa = 111 g	Dal = 25 g

The quantity served was grossly inadequate in most cases.

e) Nutritive value of mid day meals

Nutritive value (approximate) of cooked food served as mid day meal to children during JRM team visit is given below.

Name of the dish: Poori

Cooked weight: 100g

Ingredient	Amount (g/ml)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Whole wheat flour (atta)	65	222	7.9	45.1	1.1
Oil	14	126	-	-	14.0
Water	21	-	-	-	-
Total		348	7.9	45.1	15.1

(Source : Kaur & Passi, 1995)

Name of the dish: Channa

Cooked weight: 100g

Ingredient	Amount (g/ml)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Horsegram (channa)	50	161	11.0	28.6	0.3
Total		161	11.0	28.6	0.3

Name of the dish: Halwa

Cooked weight: 100g

Ingredient	Amount (g/ml)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Semolina (suji)	35	122	3.6	26.2	0.3
Sugar	20	80	-	19.8	-
Vanaspati	5	45	-	-	5.0
Water	40	-	-	-	-
Total		247	3.6	-	5.3

Name of the dish: Alooabzi

Cooked weight: 100g

Ingredient	Amount (g/ml)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Potato	60	58	1.0	13.6	neg.
Oil	2	18	-	-	2.0
Water	38	-	-	-	-
Total		76	1.0	13.6	2.0

Name of the dish: Rice

Cooked weight: 100g

Ingredient	Amount (g/ml)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Rice	40	138	2.7	31.2	0.2
Water	60	-	-	-	-
Total		138	2.7	31.2	0.2

Name of the dish: Rajmah curry

Cooked weight: 100g

Ingredient	Amount (g/ml)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Rajmah	25	87	5.7	15.1	0.3
Tomato	10	2	0.1	0.4	neg.
Onion	10	5	0.1	1.1	neg.
Oil	2	18	-	-	2.0
Water	53	-	-	-	-
Total		112	5.9	16.6	2.3

Name of the dish: Channa curry

Cooked weight: 100g

Ingredient	Amount (g/ml)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Bengal gram (Channa)	30	108	2.9	18.2	1.6
Oil	2	18	-	-	2.0
Water	68	-	-	-	-
Total		126	2.9	18.2	3.6

Name of the dish: Dal (arhar)

Cooked weight: 100g

Ingredient	Amount (g/ml)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Redgram dal (arhar)	20	67	4.5	11.5	1.3
Oil	1	9	-	-	1.0
Total		76	4.5	11.5	2.3

The nutritive value of the portions (cooked weight) being served to children under MDMS is given in table 12 below.

Table 12: Nutritive value of cooked food per serving - MDM

Name of the dish	Average cooked weight/serving (g)	Energy (kcal)	Protein (g)	Carbohydrate (g)	Fat (g)
Rice	121	167	3.3	37.7	0.2
Poori	54	188	4.3	24.3	8.1
Sabzi (aloo)	60	46	0.6	10.3	1.2
Chole	100	126	2.9	18.2	3.6
Channa	64	103	7.0	18.3	0.1
Halwa	111	274	neg	3.6	5.8
Dal	25	19	1.1	8.7	0.6

The above table indicates that the serving portions are extremely inadequate especially with respect to protein. **It is recommended by the JRM team that the meals should be made more nutrient dense and nutritionally balanced so as to ensure nutrition security and not just food security of the target group.**

In our surprise visit to the Govt. Boys Sr Sec school, Kidwai Nagar, No 1 on 29th April 2013, the salient observations on MDM were:

Menu: Sambhar - Rice.

Total quantity of cooked food (rice) with container = 27.4 kg

Weight of container = 3.4 kg

Net weight of cooked rice = 24 kg

Total weight of Sambhar (containing vegetables)with the container = 23.6 kg

Weight of the container 3.5 kg

Net weight of Sambhar (containing vegetables)= 20.1 kg

Total no. of beneficiaries = 130 (upper primary classes: 6th to 8th)

Therefore, the amount per beneficiary computes to be:

Weight of cooked rice = 185 g/ child; which is approximately 80 g of raw rice (providing 280 kcals and 8 g protein)

Weight of Sambhar (containing vegetables)= 155 g per child ; which is approximately 25 g of raw dal plus some vegetables (providing 85 kcals and 6.0 g protein)

Thus, the meal here could provide nearly 365 kcals and 14.0 g protein; and this too is by computation and not based on the amount of food served to the children.

Further, for ensuring food safety, the temperature of cooked food was noted at the time of receiving and it was found that the temperature of cooked rice was 58^o C , and that of Sambhar with vegetables: 75^o C.

Food acceptability was very high.

The records of MDM were found to be in order, up to date and well maintained.

The committee constituted for MDM was found to be very active.

However, the children reported that they did not like the channahalwa menu and that it should be replaced. Majority of the students reportedly wasted the food in this case.

A trial intervention to facilitate addition of vegetables to MDM

The Department of Primary Education revised the MDM guidelines, so that MDM provides 100 g of cereals, 20 g of pulses and 50 g of non-tuber vegetables per day per child in the academic year 2006-07, however it was not operationalized till 2007-08. Therefore to check the feasibility a trial intervention was carried out to facilitate additional 50 g of non-tuber seasonal vegetables (including green leafy vegetables) to the existing recipes of MDM (Ramanna and Passi, 2010).

Table 13 : Type and amount of vegetables added in the modified menus

The then existing Menu	Modified menu	Vegetables (g)				Can be served with
		Tomato	Carrot/pumpkin	Spinach	Cauliflower/ cabbage	
Dal	Palak dal	20		30		Rice
Veg. Pulao	Veg Pulao	10	15	10	15	-
Rajmah	Rajmah	20	15	15		Rice
Chole	Chole	20	15	15		Rice/poori
Aalu	Mixed veg	10	20		20	Poori
Chanaaalu	Chanaaalu	20		30		Palakpoori

It was noted that the dark colour of the gravy masked the colour of the pureed/mashed vegetables while the spices subdued the flavor of these vegetables. Sensory evaluation of showed that these modified dishes were similar to the habitually consumed preparations which did not contain vegetables. In fact the vegetables added thickness to the gravy. Since the children relished tomatoes, cauliflower and peas. These were added as large well defined pieces in rice dishes/potato curry.

Table 14: Overcoming challenges while adding vegetables in MDM menus

Problems	Solutions
Vegetables are expensive and so the cost of 50gm of vegetables may exceed the budget. Non availability of required amount of fresh vegetables very early in the morning.	One MDM supplier who was willing to introduce 50gm of seasonal non tuber vegetables in MDM was identified and linked up with one vegetable cooperative (Mother Dairy) willing to supply fresh vegetables at Rs.10/ per Kg throughout the year.
Non availability of micronutrient rich vegetables especially GLVs, carrots in summer months.	A seasonal calendar for vegetables was made, GLVs available during non winter months were indentified. Pumpkin was suggested in lieu of carrots during summer months.
Vegetables could be a source of contamination with worms/their eggs, sand or pesticides	Kitchen personnel had attended training programme where they were taught picking, cleaning, washing vegetables thoroughly before chopping.
Chopping vegetables is labor intensive and time consuming task.	Vegetable chopping machines were purchased; GLVs were boiled and pureed without chopping.
GLVs are disliked by majority of children.	GLV puree was added to the flour to make green dough for pooris or added to the gravy of rajmah/chole.

4.2 Food Consumption Pattern: Although it would have been more appropriate to collect data on the dietary patterns of children using one day 24 hour recall method (previous day's diet) but due to time and resource constraints, this was not feasible. Hence on the day of the visit, data on breakfast consumption were gathered from 343 students. Majority of the children (91.0%; n=312); almost equal number of boys (91.6%, n=152) and girls reportedly consumed breakfast before coming to school (Table 18 and Figure 15). Qualitative data indicated that the amount and quality of food consumed was generally low. Most frequently consumed breakfast was tea with rusk, bread or chappati. In a study by Rekhi and Passi (2007), it was found that both in MCD and NDMC schools, nearly 22% children reported on an empty stomach, with more boys than girls. However, the present data indicate an improvement in the breakfast eating pattern. In the short span of time available, rapport could not be developed with children which, is necessary to draw more reliable data from the children.

Table 15: Gender Wise Data on Breakfast Eating Practices

Category	Male n (%)	Female n (%)	Pooled Data n (%)
Yes	152 (91.6)	160 (90.4)	312 (91.0)
Sometimes	6 (3.6)	16 (9.0)	22 (6.4)
No	8 (4.8)	1 (0.6)	9 (2.6)
Total	166 (100)	177 (100)	343 (100)

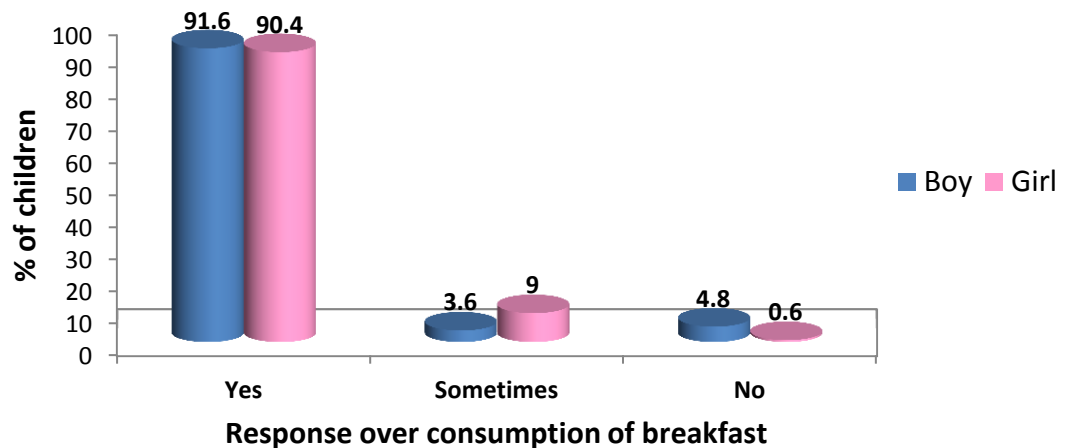


Figure 8: Breakfast consumption pattern

4.3 Nutritional Status of Children

Anthropometric data (height and weight) have been gathered from 498 children (243 boys and 255 girls) covering 36 schools. As already mentioned data on mid-upper arm circumference (MUAC) have not been gathered since it is no longer considered a reliable indicator for assessing nutritional parameter. Of the 638 children whose height and weight data had been gathered, data relating to 498 children (gathered till 27th April 2013) had been subjected to detailed statistical analysis. However, due to paucity of time, the data for 140 children (gathered on 29th April 2013) have been analyzed and presented separately. Further, since the WHO reference standards (2007) for WAZ (weight for age) are available only for children up to age 10 years while HAZ (height for age) and BAZ (BMI for age) are available up to 19 years, the analysis has been done accordingly.

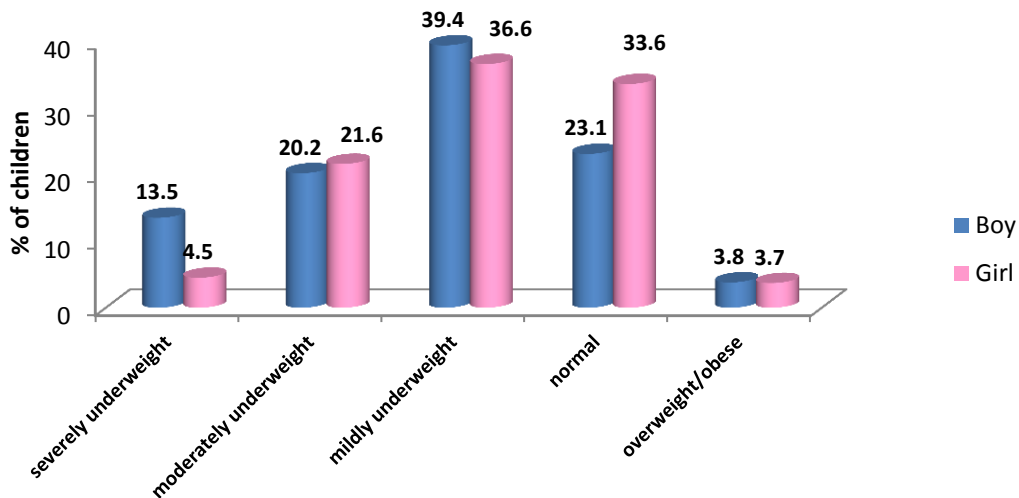
Body Weight:

Of the total sample (primary school children) 29.4% (n=70) children were moderately/severely underweight. Under nutrition was more prevalent in boys as compared to girls. According to the classification given by World Health Organization (2007), 73.1% (n=76) boys and 62.7% (n=84) girls were had low weight for age. Severe under nutrition was higher in boys as compared to girls (refer Table 16 and Figure 9).

Table 16: Gender Wise Data on weight for Age Z scores (n=238)

Category	Classification	Male n (%)	Female n (%)	Pooled Data n (%)
<= - 3 SD	Severely underweight	14 (13.5)	6 (4.5)	20 (8.4)
-2.99 to- 2 SD	Moderately underweight	21 (20.2)	29 (21.6)	50 (21.0)
-1.99 to- 1 SD	Mildly underweight	41 (39.4)	49 (36.6)	90 (37.8)
- 0.99 to 1 SD	Normal	24 (23.1)	45 (33.6)	69 (29.0)
(> 1SD)	Overweight/ Obese	4 (3.8)	5 (3.7)	9 (3.8)
Total		104 (100)	134 (100)	238 (100)

$X^2 = 8.040$; $p=0.90$ Note: WAZ available only for children up to 10 years.



Classification of children by weight for Age (WHO, 2007)

Figure 9: Categorization of children (5-9 years) by weight for age - Gender wise

Age and gender wise data is given in annexure 1. Age specific data indicate that majority i.e. 67.2% (n=160) children were underweight; 58.8 % (n=140) were mild to moderately malnourished while 8.4 % (n=20) had severe malnutrition. Under weight for age is an indicator of energy deficiency which is usually an outcome of

inadequate food intake. The data are a pointer that most children are not getting adequate amount of food in their daily diets and perhaps an increase in the amount of mid day meal served to such children may prove to be beneficial in improving their overall health status (Table 17 and Figure 10).

Table 17: Age Wise Data on weight for Age Z scores (n=238)

Category	Classification	Primary Children 5 to 9 years n (%)
<= - 3 SD	Severely underweight	20 (8.4)
-2.99 to- 2 SD	Moderately underweight	50 (21.0)
-1.99 to- 1 SD	Mildly underweight	90 (37.8)
- 0.99 to 1 SD	Normal	69 (29.0)
(> 1SD)	Overweight/ Obese	9 (3.8)
Total		238 (100.0)

Note: WAZ available only for children up to 10 years.

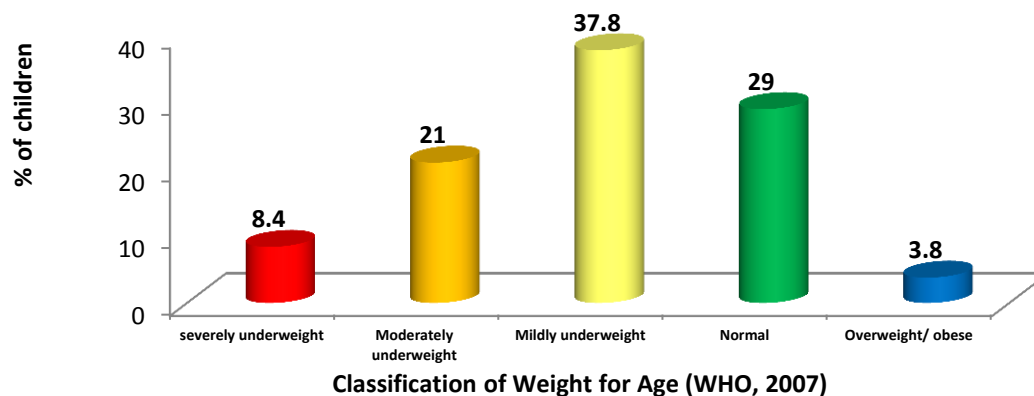


Figure 10: Categorization of children (5-9 years) by weight for age

District wise weight for age data (5-9 years) indicated prevalence of underweight (moderate to severe) was 26.2 %, 9 %, 16.7 %, 38.2 %, 30.3 % and 48.4 % in central, south, east, south-west, New Delhi and West Delhi respectively. It was highest (48.4

%; n=15) in west Delhi and lowest in east Delhi (16.7%; n=4). Details are given in Table 11 and Figure 8. It is proposed that schools from West Delhi District such as Sarvodaya Kanya Vidyalaya, , Sarvodaya Bal Vidyalaya be closely monitored.

Table 18 : District Wise Data on Weight for Age Z scores (n=238)

Category	Classification	Central Delhi	South Delhi	East Delhi	South West Delhi	New Delhi	West Delhi	Pooled Data n (%)
<= - 3 SD	Severely underweight	1 (2.4)	1 (1.9)	0 (0)	9 (16.4)	2 (6.1)	7 (22.6)	20 (8.4)
-2.99 to- 2 SD	Moderately underweight	10 (23.8)	8 (15.1)	4 (16.7)	12 (21.8)	8 (24.2)	8 (25.8)	50 (21.0)
-1.99 to- 1 SD	Mildly underweight	14 (33.3)	23 (43.4)	15 (62.5)	17 (30.9)	13 (39.4)	8 (25.8)	90 (37.8)
- 0.99 to 1 SD	Normal	15 (35.7)	18 (34)	5 (20.8)	16 (29.1)	9 (27.3)	6 (19.4)	69 (29.0)
(> 1SD)	Overweight/ Obese	2 (4.8)	3 (5.7)	0 (0.0)	1 (1.8)	1 (3.0)	2 (6.5)	9 (3.8)
TOTAL		42 (100)	53 (100)	24 (100)	55 (100)	33 (100)	31 (100)	238 (100)

$X^2 = 31.872$; $p=0.045$

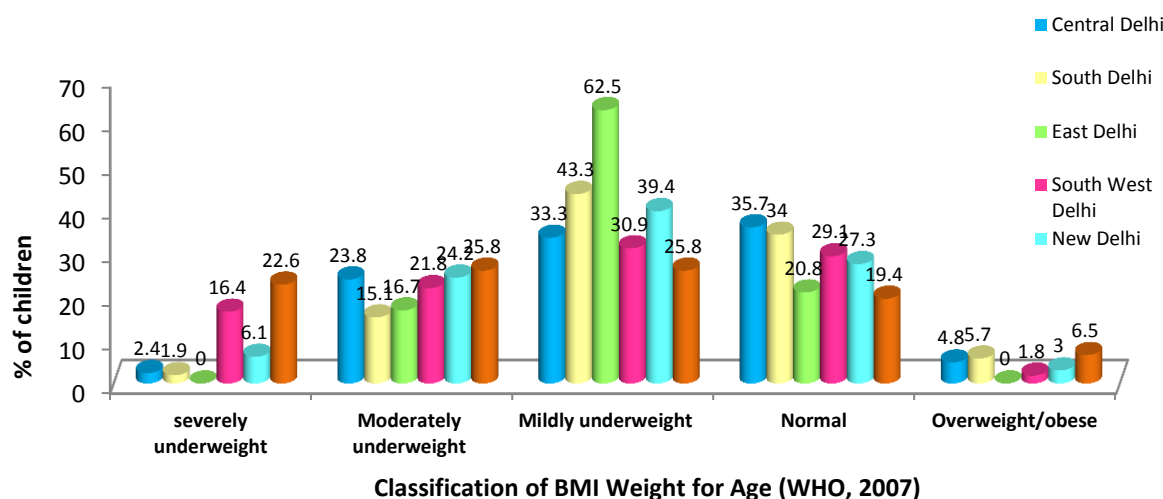


Figure 11: Categorization of children (5-9 years) by weight for age - District wise Height

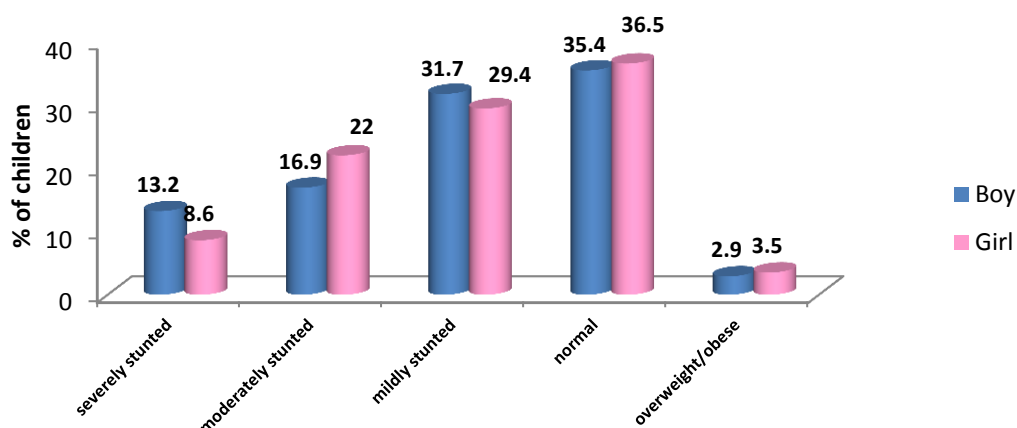
Overall 35.9% (n=179) children had normal height for age while 50.0% (n=249) were found to be stunted (mild to moderate). Moderate/severe stunting was found

in 30.3 % (n=151) children i.e. 30.2 % (n=73) and 30.6 % (n=78) in boys and girls respectively. According to WHO (2007) categorization, stunting was severe in boys as compared to girls and majority of stunted children were in the mild to moderate category. Refer Table 19 and Figure 12 for details.

Table 19: Gender Wise Data on Height for Age Z scores (n=498)

Category	Classification	Male n (%)	Female n (%)	Pooled Data n (%)
<= - 3 SD	Severely stunted	32 (13.2)	22 (8.6)	54 (10.8)
-2.99 to- 2 SD	Moderately stunted	41 (16.9)	56 (22.0)	97 (19.5)
-1.99 to- 1 SD	Mildly stunted	77 (31.7)	75 (29.4)	152 (30.5)
- 0.99 to 1 SD	Normal	86 (35.4)	93 (36.5)	179 (35.9)
(> 1SD)		7 (2.9)	9 (3.5)	16 (3.2)
Total		243 (100)	255 (100)	498 (100)

$$X^2 = 4.435; p=0.350$$



Classification of children by Height for Age (WHO, 2007)

Figure 12: Categorization of children by height for age – Gender wise

The height for age data indicated that with advancing age the prevalence and severity of stunting was higher. 26.8% (n=63) primary (5-9 years) and 33.3% (n=88) upper primary school children were stunted (moderate to severe). Stunting

is indicative of intra-generational under nutrition. Inadequate intake of nutrient dense diet (particularly micro nutrients) results in lower increase in height during the years of growth. Details are given in Table 20 and Figure 13.

Table 20: Age Wise Data on Height for Age Z scores (n=498)

Category	Classification	Primary Children 5 to 9 years n (%)	Upper Primary Children ≥10 years (%)	Pooled Data n (%)
<= - 3 SD	Severely stunted	22 (9.4)	32 (12.2)	54 (10.8)
-2.99 to- 2 SD	Moderately stunted	41 (17.4)	56 (21.1)	97 (19.5)
-1.99 to- 1 SD	Mildly stunted	71 (30.6)	80 (30.4)	152 (30.5)
- 0.99 to 1 SD	Normal	91 (38.7)	88 (33.5)	179 (35.9)
(> 1SD)		9 (3.8)	7 (2.7)	16 (3.2)
Total		235 (100)	263(100)	498 (100)

$X^2 = 3.339; p=0.504$

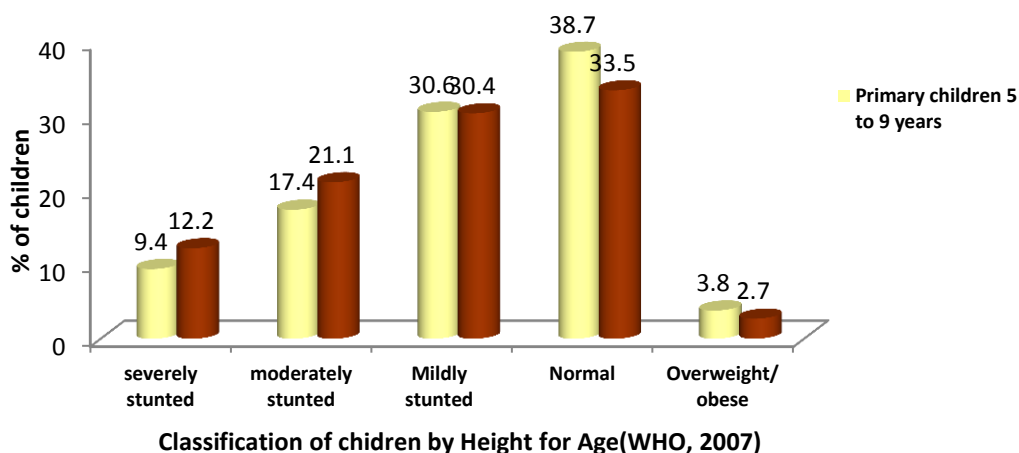


Figure 13: Categorization of children by height for age

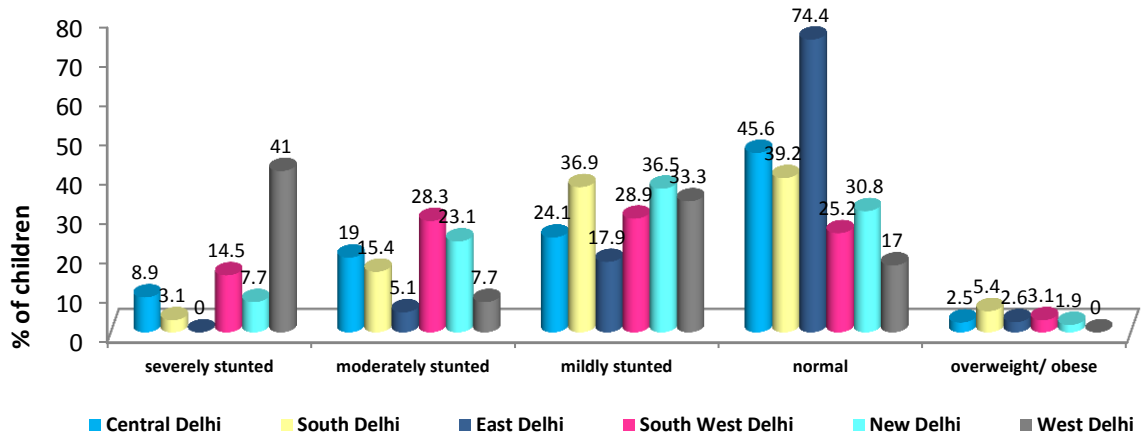
Prevalence of stunting was 52.0%, 55.4%, 23.0%, 71.7%, 67.3% and 82.0% in central, south, east, south-west, New Delhi and west Delhi respectively. It was highest (82.0%; n=32) in west Delhi and lowest in east Delhi (23.0%; n=9).

Comparison of weight for age and height for age indicate that children belonging to east Delhi are lighter and taller while those belonging to west Delhi were heavier and shorter. Details are given in Table 21 and Figure 14.

Table 21: District Wise Data on Height for Age Z scores (n=498)

Category	Classification	Central Delhi	South Delhi	East Delhi	South West Delhi	New Delhi	West Delhi	Pooled Data n (%)
<= - 3 SD	Severely stunted	7 (8.9)	4 (3.1)	0 (0)	23 (14.59)	4 (7.7)	16 (41.0)	54 (10.8)
-2.99 to- 2 SD	Moderately stunted	15 (19.0)	20 (15.4)	2 (5.1)	45(28.3)	12 (23.1)	3 (7.7)	97 (19.5)
-1.99 to- 1 SD	Mildly stunted	19 (24.1)	48 (36.9)	7 (17.9)	46(28.9)	19 (36.5)	13 (33.3)	152 (30.5)
- 0.99 to 1 SD	Normal	36 (45.6)	51 (39.2)	29 (74.4)	40 (25.2)	16 (30.8)	7 (17.9)	179 (35.9)
(> 1SD)		2 (2.5)	7 (5.4)	1 (2.6)	5 (3.1)	1 (1.9)	0 (0)	16 (3.2)
Total		79 (100)	130 (100)	39 (100)	159 (100)	52 (100)	39 (100)	498 (100)

$X^2 = 98.738; p=0.000$



Classification of Height for Age (WHO, 2007)

Figure 14: Categorization of children by height for age - Districtwise

Body Mass Index

Body mass index is a measure of relative body fatness. In the enrolled sample, 51.6 % (n=257) children were malnourished i.e. they had lower than normal body fatness. According to the WHO classification of body mass index, 54.3 % (n=132) and 48.9 % (n=125) boys and girls were malnourished. Details are given in Table 22 and Figure 15.

Table 22: Gender Wise Data on BMI for Age Z scores (n=498)

Category	Classification	Male n (%)	Female n (%)	Pooled Data n (%)
<= - 3 SD	Severely malnourished	12 (4.9)	20 (7.8)	32 (6.4)
- 2.99 to- 2 SD	Moderately malnourished	50 (20.6)	32 (12.5)	82 (16.5)
-1.99 to- 1 SD	Mildly malnourished	70 (28.8)	73 (28.6)	143 (28.7)
- 0.99 to 1 SD	Normal	94 (38.7)	115 (45.1)	209 (42.0)
(> 1SD)	Overweight/ Obese	17 (7.0)	15 (5.9)	32 (6.4)
Total		243 (100)	255 (100)	498 (100)

$$X^2 = 7.987; p=0.093$$

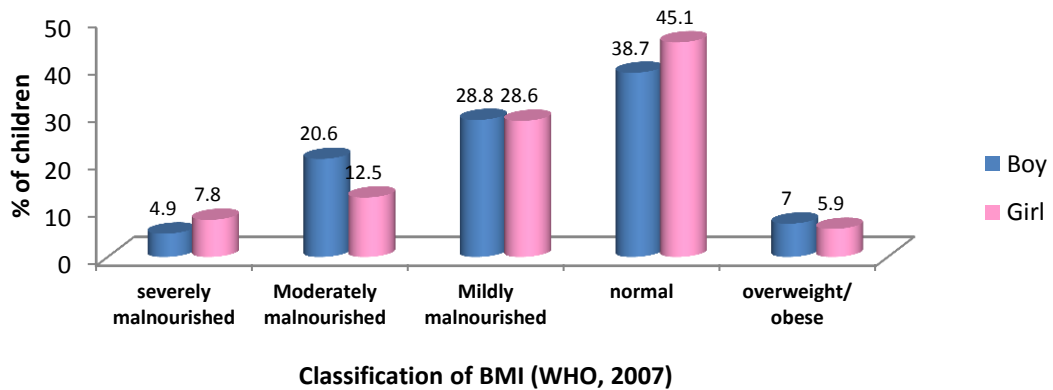


Figure 15: Categorization of children by BMI for age – Gender wise

Data on BMI for age indicates that under nutrition is getting more pronounced with increasing age. Based upon BMI for age, 18.3% (n=43) and 27.0% (n=71) children in the age group of 5 to 9 years and 10 to 14 years were moderate to severely malnourished. Data on BMI for age synchronizes with that on height and weight for age. Details are given in Table 23 and Figure 16.

Table 23: Age Wise Data on BMI for Age Z scores (n=498)

Category	Classification	Primary Children 5 to 9 years n (%)	Upper Primary Children >=10 years (%)	Pooled Data n (%)
<= - 3 SD	Severely malnourished	15 (6.4)	17 (6.5)	32 (6.4)
- 2.99 to- 2 SD	Moderately malnourished	28 (11.9)	54 (20.5)	82 (16.5)
-1.99 to- 1 SD	Mildly malnourished	64 (27.2)	79 (30.0)	143 (28.7)
- 0.99 to 1 SD	Normal	110 (46.8)	99 (37.6)	209 (42.0)
(> 1SD)	Overweight/ Obese	18 (7.7)	14 (5.3)	32 (6.4)
Total		196 (100)	220 (100)	498 (100)

$X^2 = 9.477$; $p = 0.056$

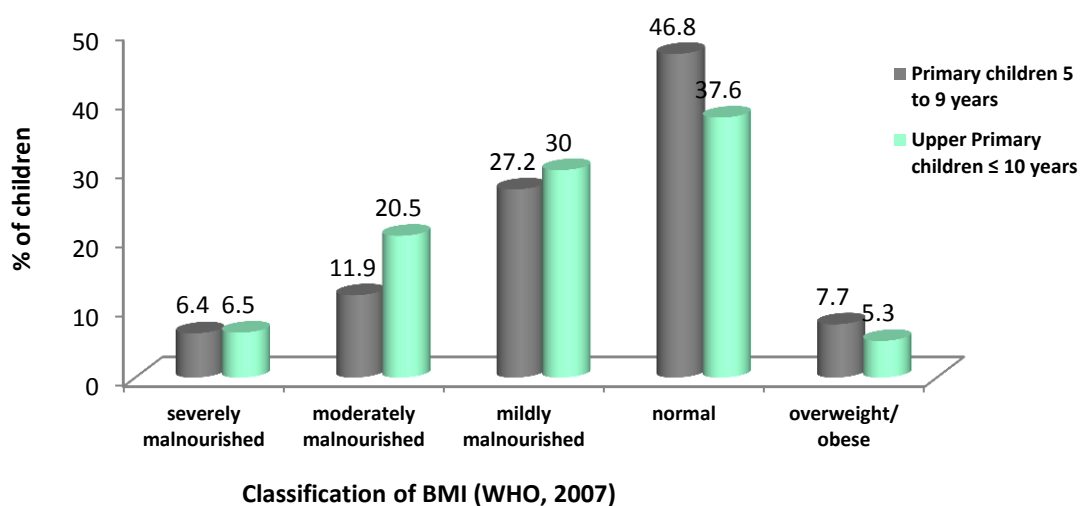


Figure 16: Categorization of children by BMI for age

BMI for age data for various districts indicates that 35.9% (n=14), 54.7% (n=87), 46.9% (n=37), 51.9% (n=27), 52.3% (n=68) and 61.6% (n=24) in west, south west, central, New Delhi, south and east Delhi were malnourished respectively. District wise comparison of BMI for age data indicates that the highest prevalence of malnutrition was in east Delhi (61.6%, n=24). Number of malnourished children were lowest in west Delhi (35.9%; n=14). District wise data on weight for age has also indicted that children belonging to west Delhi were heavier and shorter as compared to their counterparts from other districts. Dietary habits and life style practices influence body fatness and hence BMI. In a study conducted in 2012, 20% (n=6) boys and 3.3 percent (n=1) girls had BMI <2SD in south west or cantonment area of Delhi (Seema and Suri, 2012). Details are given in Table 23 and Figure17.

Table 24: District Wise Data on BMI for Age Z scores (n=498)

Category	Classification	Central Delhi	South Delhi	East Delhi	South West Delhi	New Delhi	West Delhi	Pooled Data n (%)
<= - 3 SD	Severely malnourished	6 (7.6)	7 (5.4)	3 (7.7)	11 (6.9)	4 (7.7)	1 (2.6)	32 (6.4)
- 2.99 to- 2 SD	Moderately malnourished	13 (16.5)	26 (20.0)	4 (10.3)	27 (17.0)	10 (19.2)	2 (5.1)	82 (16.5)
-1.99 to- 1 SD	Mildly malnourished	18 (22.8)	35 (26.9)	17 (43.6)	49 (30.8)	13 (25.0)	11 (28.2)	143 (28.7)
- 0.99 to 1 SD	Normal	34 (43.0)	58 (44.6)	11 (28.2)	67 (42.1)	23 (44.2)	16 (41.0)	209 (42.0)
(> 1SD)	Overweight/ Obese	8 (10.1)	4 (3.1)	4 (10.3)	5 (3.2)	2 (3.8)	9 (23.1)	32 (6.4)
Total		79 (100.0)	130 (100.0)	39 (100.0)	159 (100.0)	52 (100.0)	39 (100.0)	498 (100)

$X^2 = 38.35; p=0.008$

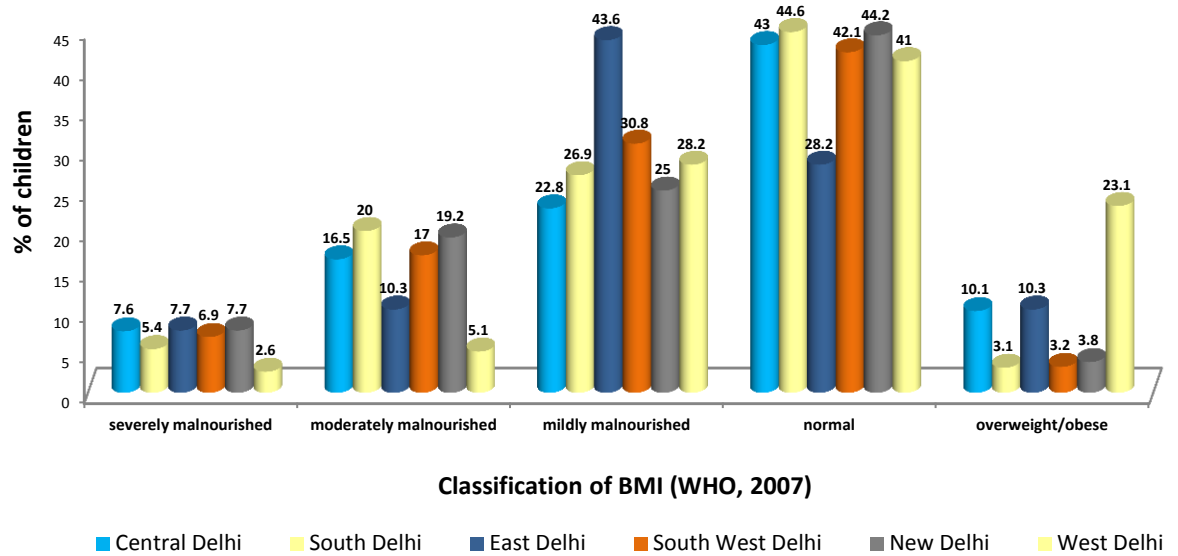


Figure 17: Categorization of children by BMI for age – District wise

Impact of School Meals – a platform for imparting nutrition & health education and some of Global and Indian Experiences

Nutrition and Health Education is an intervention that addresses all these three interdependent and indispensable components - Nutrition, Health and Education. Therefore, Nutrition and Health Education is urgently required for the children, especially in developing countries like India.

Some school food programmes have shown marked effects on attendance and school performance (Levinger, 1994). In Benin, children in schools with food services scored significantly higher on second grade tests than those in schools without food services (UNESCO, 2000). In Jamaica, providing breakfast to primary school students significantly increased their attendance (Simeon and Grantham-McGregor, 1989). Nutritional interventions such as micronutrient supplements and the treatment of intestinal worms have also proved to increase students’ attention and cognition. Research by the Ghana Partnership for Child Development (1996) showed that iron supplements (which could be effectively administered by teachers) lead to significant improvements (Berg, 1999). In Malawi, when the diets

of primary school children were supplemented with iron as well as iodine, the gain in IQ scores was greater than with iodine supplements alone (Shrestha, 1994).

Indian experiences: Schools provide the most effective and efficient way to reach a large segment of the population particularly the young children, school staff, families and community members (Devadas, 1983). Nutrition and Health education imparted to school children in their formative age is an effective method for long term protection and promotion of their health. Primary school children are more open minded and likely to be receptive to changes in their ideas and agreeable to modifications of their habits. Therefore, primary school education can serve as a good ground for laying the foundation for healthy eating habits among the children. Other advantages of using the school setting for imparting NHE are:

- Schools have the mandate and responsibility to guide young children right from childhood to adolescence. Inculcating healthy habits and promoting hygienic/sanitary practices among the children.
- At school, children are a captive audience, it is easier to teach children in an organized set up.
- Most children attend school for a number of years on a regular basis. Through the school system, a large number of children can be reached at a given time.
- Schools have qualified teachers, who are treated as gospel by their pupils especially by the primary classes.
- Adoption of Universal elementary Education (UEE) or Sarva Siksha Abhiyan (SSA), which aims to provide useful and quality education to all children in the age group of 6-14 years by 2010, has provided a conducive environment for distribution of MDM and other related nutrition/health intervention programmes. Thus, MDM could be used as tool for Nutritional/Health education intervention/health services.
- Ongoing intervention programmes such as MDM Programme could be used as tool for educational intervention/health services.

- It could be expected that the children carry nutrition/health messages to their families. They could be effective 'change agents' for bringing about nutritional awareness in the community.
- Parents could be reached through parent teacher meetings to further improve Nutrition and Health related awareness of the community. (page No. 2-3)

MDM Programme, which is well established in MCD schools, has been used as a pivotal point for imparting NHE to MCD school children. These children come from low income group families where dietary diversification is expected to be less and so it would be a worthwhile effort to use MDM as a demonstrative meal to build Nutrition/Health/Hygiene/ Sanitation related messages around it.

Feeding programmes without the component of NHE have not resulted in sustainable changes among children. Such programmes have to be built into a sound school curriculum along with NHE and health care to attain should impact (Gopalan, 1997). MDM will be meaningless if not combine with synergistic and mutually reinforcing components.

The School Health Program should be regularised and the guidelines should be followed. As per the latest data available, the coverage of SHP 2010-11 is 61 per cent of schools covered and 68 per cent of children covered. The coverage should be improved and data should be uploaded on the State MIS of MDM.

CHAPTER: 5

MDM INFORMATION DISSEMINATION

OBSERVATIONS: AT THE SCHOOL LEVEL

The MCD and Delhi Cantonment Board (DCB) administered schools, which were surveyed (MC primary Model School, Nigam Pratibha Vidyalaya, Cantonment Board Secondary School and Cantonment Board Senior Secondary School) did not have the MDM logo or any MDM related information displayed on the notice boards. Nearly all schools surveyed had the SSA logo alongwith the necessary information but the MDM logo was either missing or not displayed at a prominent place.

Unlike the NDMC schools (N.P. Girls School), there has been no practice of regular 'workshops/ training sessions' for school Principals and personnel responsible for MDM both for information dissemination and grievance redressal. More than 70 per cent of the schools did not have any information regarding guidelines on menu and nutritive content (energy & protein in specific) of the MDM served per day/ child.

The mission recommends that the Principals of each school should be the nodal information officers for passing the onward transfer of information (new guidelines, circulars etc.) to the MDM-in-charge, (Home Science) teachers, involving the students and parents as well.

The mission also recommends that the MDM logo and entitlements of children should be displayed at a prominent place in the schools so that it is easily visible to all.

MAINTENANCE OF RECORDS:

At present the schools are supposed to maintain daily record of attendance as well as the number of children avail mid day meal. Computerized meal card was available in all the schools. However, it was noticed that these necessary records were not maintained daily in majority of the visited schools and it requires urgent attention. In 2 schools under the Delhi Cantonment Board visited by the JRM

team it was noticed that the records were concocted and showed 100 per cent MDM intake as against attendance continuously for the last three years. (Plate 2)

The registers maintained for checking and tasting of meal by the teachers were available in most of the schools. However, the observations as written in register by the teachers were very vague like good, satisfactory etc.

Date	Total No. of Children Enrolled	Total No. of Children Present	Total No. of Meal received	Name of Item received	No. of Wheat based item	No. of Rice based item
1-3-13	433	221	221	Malwa chana	221	
2-3-13	433	329	329	Kadhi Rice		329
4-3-13	433	260	260	Poori Sabji	260	
5-3-13	433	329	329	Dal Rice		
6-3-13	433	249	249	Poorichole	249	
7-3-13	433	201	201	Chole Rice		201
8-3-13	433	131	131	Malwa chana	131	
9-3-13	433	209	209	Poori Sabji	209	
10-3-13	433	145	145	Poorichole	145	
11-3-13	433	329	329	Kadhi Rice		329
		2403				

Plate 2 The Cooked Meal Card of DCB Senior Secondary School, Sadar Bazaar. On cross verification, the data was to be just randomly put without counting the number of children who have not taken the meal on that day.

The school surveyed do not maintain any record of the food received from the supplier on day-to-day basis nor the record of total quantity of food received against the number of children present so as to assess whether the amount of food received was in accordance to the MDM norms laid down for the cooked food by the Delhi Govt. Kautilya Government Sarvodaya Vidyalaya and GSK-Sarvodaya Kanya Vidyalaya could not provide a record of the bills/ payment made to the kitchen/food supplier. The average time of making the payment (from the time of receipt of the bill) is approximately one month.

The mission recommends that teachers need to be sensitized on the issue of putting specific observations regarding tasting and other sensory evaluation to ascertain the quality of mid day meal.

None of the schools had any proper feedback register –which is on the certification of the food taste/ quality.

MID DAY MEAL SCHEME

Session - 20
Date 02-04-15
Tel No.

Name of Supplier : _____
Name of Suppliers Employee : _____
Name of School : *N.P. Bengali Girls Sr. Sec. School*
Name of Menu Meal Received : _____
Total Enrollment Nur _____ U. Pry. *228* Sec. *244* Sr. Sec. *258*

S.No.	Class/Section	Total Enrollment	Present	Absent	No. of Student Meal Received	Signature of Class Tr.	Signature MDM I/C	Remarks (if any)
	<i>VI A</i>	<i>34</i>	<i>31</i>	<i>03</i>	<i>31</i>	<i>[Signature]</i>		
	<i>B</i>	<i>28</i>	<i>23</i>	<i>05</i>	<i>23</i>	<i>[Signature]</i>		
	<i>C</i>	<i>26</i>	<i>16</i>	<i>10</i>	<i>26</i>	<i>[Signature]</i>		

Plate 3 Incomplete feedback register : N.P. Girls School, Gole Market

Only the NDMC schools have maintained the record of School Management Committees (SMC) meeting with details of composition and minutes of the meetings .

On closely observing the minutes, mission noticed that there are no discussions on the MDM subject. The MCD schools have no SMC constituted the DOE schools (Zeenat Mahal School, RSBV Trilok Puri) could not show any records.

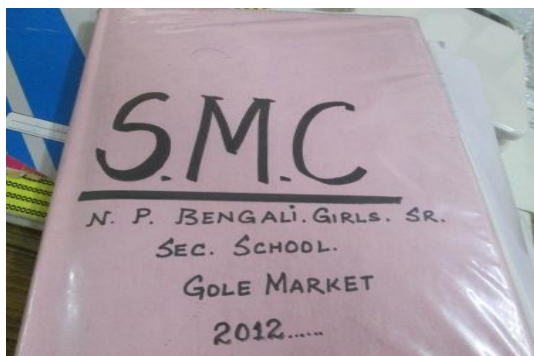


Plate 4: SMC registers were seen only in two out of ten schools surveyed in both Central and East Delhi schools.

The mission also noticed the good practices in schools like Sarvodaya Kanya Vidhyalaya, Paschim Vihar and Sarvodaya Kanya Vidhyalaya, Naraina which had all records including the health referral data complete and available in school

	Primary	Upper Primary
Boys	0	0
Girls	0	0
Number of Children diagnosed with refractive errors	0	0
Number of Children provided spectacles	0	0
Number of Children Problems treated during School Health Checkup	0	0
Number of Children Problems detected during School Health Checkup and were referred	0	0
Number of Children received weekly Iron and Folic acid tablets in the last 3 months	0	0
Number of children received deworming tablets	0	0
Number of children received Vitamin-A supplementation	0	0

Plate 5: Health check up/ referral data Sarvodaya Kanya Vidhyalaya, Narayana

QUALITY AND QUANTITY OF FOOD SERVED:

The students were generally satisfied with the **quality and quantity** of the mid day meal, however, expressed particular liking towards Rice-Rajma, Rice – Kadhi, and

puri – aloo sbji. The most disliked menu is of halwa – chana, majority of the students suggested to replace halwa – chana with Rice – Rajma or with vegetable pulao.

There are also instances of children not liking the food on particular day such as the puris were either half fried or moist or the sabji was not cooked properly. Some of the children do mention their dissatisfaction with quantity of MDM too.

i. *Quality*

- The students were generally satisfied with the quality and quantity of the mid day meal. They however, expressed particular liking towards Rice-Rajma, Rice – Kadhi, and puri – aloo sbji. The most disliked menu is of halwa – chana, majority of the students suggested to remove halwa – chana with Rice – Rajma or with vegetable pulao.
- There are also instances of children not liking the food on particular day for the puris were either half fried or moist or the sabji was not cooked properly. Some of the children do mention their dissatisfaction with quantity



Plate 6: *The scene after lunch break/ an hour after MDM distribution. Children not eating and taking back the food in their lunches—NP Middle School, Gole Market*

- Government Boy’s Senior Secondary School have complained of poor quality of food due to which (8 out of 12 students from Class VII, who were interviewed) said that they bring the food from their homes.
- Traces of impurities reported in the food by the students
- No food tasting done by the parents/ visitors
- One officer of the RSBV (Trilok Puri) reported that there was a case of food poisoning of nearly 100 students after the intake of MDM. Though the instance was reported to the DOE but no copy of the complaint letter was provided to the JRM team.



Plate 7: Portion of channa given at the Zeenat Mahal, Kamla Market

With regard to the Quantity, Portions given are inadequate in some cases. Food is distributed in the tiffins brought by the students. The major issue of concern is that those students who do not bring or forget to bring their tiffins, are not given food as the school does not have any provision for plates/ spoons etc. In case the children do not bring their tiffin box, the paper plates are used for serving of MDM in the schools, which hold very less quantity of food. During the interactions 45% of the children reported that they do get the extra food, if requested.

The State Govt. needs to make arrangement for eating plates and spoons from the MME funds.

Quantity:

- Portions given are inadequate and problematic in some cases. Food is distributed in the tiffins brought by the students. The major issue of concern is that those students who do not bring or forget to bring their tiffins, are not given food as the school does not have any provision for eating plates/ spoons etc.

In case the children do not bring their tiffin box, the paper plates are used for serving of MDM in the schools, which hold very less quantity of food. During the interactions 45% of the children reported that they do get the extra food, if requested.

The State Govt. needs to make arrangement for eating plates and spoons from the MME funds.



Plate 8: *A scene at the MC Primary Model School where at left, a student is not given MDM because he has not got his tiffin; at right he eats the food which is packed from home during lunch break.*

The State Govt. needs to make arrangement for eating plates and spoons. The mission also recommends to revise the menu as per the liking of children. The provision of weighing machine at school is also required for quantification of mid day meal received. Similar practices were noticed in Cantonment Secondary School, Sadar Bazaar.



Plate 9: *Children who did not bring their tiffins from home shared it in their friends' tiffins.*

INADEQUATE AND SHORTAGE OF FOOD:

Students studying in second shift in Nigam Pratibha Vidyalaya reported that MDM is not served to them on the exam days, if exam takes place in the first half. They also informed if the exam takes place during first half, they were served biscuits, while students from the first shift receives hot cooked mid day meal.

The mission recommends that the State needs to devise suitable mechanism to ensure that mid day meal to be served to all the children, and concerned principals needs to be directed to provide the information in advance to the supplier in such cases.

Lab Testing of the Food Samples

The reports of the lab tests have not been shared or even informed to the schools and the zonal educational officers. It is submitted directly to the Department and no information of the results of the tests are shared thereafter.

The Principal of the DOE schools (Sarvodaya Kanya Vidyalaya , Chander Nagar and RSBV Trilok Puri) stated that there has been no lab testing done of the food samples from their schools. No Lab testing of the food samples was ever done in the Cantonment administered schools.

Infrastructure

- v) School building: All the school building were found to be good except in Zeenat Mahal school at Daryaganj, where the building needs repair and the chair and benches needs to be changed.
- vi) Fire extinguisher: Fire Extinguishers are available in all the schools.
- vii) Toilet facilities: Almost all the schools have separate toilets for girls. The cleanliness in the toilets is of miserable condition in almost all the schools. Even supply of water in the toilets is not proper.
- viii) Drinking water facility: All the visited schools have arrangement of potable water but quality needs to be periodically checked. the drinking water facility is available in all the visited schools, however, the supply of Drinking water is irregular in the DOE and MCD schools viz. Sarvodaya Kanya Vidyalaya, RSBV, Trilok Puri, Zeenat Mahal School, Kamla Market, and Badarpur No. 2. Delhi Jal Board (DJB) water is supplied to schools for limited hours. Hence, scarcity of water was

found to be a common problem, particularly in 2nd shift boy's schools. Even schools having bore wells were found having irregular water availability, especially in summer. Students bring their own drinking water from home.



The team observed that the Drainage system are not very well maintained, the hand washing areas were in really bad shape in some of the schools. and waste disposal mechanism needs to be improved in schools.

Plate 10: Poor Drainage system in Zeenat Mahal, Kamla Market

School Health Programme

The MDMS guidelines envisages that necessary interventions like regular health checkup, supplementation of micronutrients and provision for de – worming tablets, Vitamin ‘A’ dosage and IFA tablets are to be provided in convergence with the National Rural Health Mission (NRHM) of Ministry of Health & Family Welfare.

The mission observed that although doctors are visiting the schools under Chacha Nehru Health scheme but children except in Delhi Cantonment Board, are not provided with IFA tablets, Vitamin ‘A’ dosage. Only de-worming tablets are provided to children that too once in a year. No health cards were maintained in DOE, MCD and NDMC schools. Although the health registers were maintained in visited MCD schools.

State sponsored health scheme operational in most of the schools recording the BMI and conducting the clinical test on the children. But in schools like Zeenat Mahal (Kamla Market), Sarvodaya Kanya Vidyalaya (Chander Nagar), Nigam Pratibha Vidyalaya (East Laxmi Market), MC Primary Model School, RSBV Trilok Puri, Nigam Pratibha Vidyalaya, the process adopted was incomplete. The students interviewed in these schools reported that they have not been referred to any doctor and only

de worming tablets were given to the students. The health card is incomplete in MCD and DOE schools and none of the schools visited had shared the data with the parents of students studying in that particular school.

The mission recommends to strengthen the convergence with the school health programme, as the guidelines provide for regular distribution of Vitamin 'A' dosage, IFA tablets, and de-worming tablets. The health card of the children also needs to be maintained at every school.

HUMAN RESOURCES : TRAINING, STAFFING AND HONORARIUM

Except the NDMC schools visited there were no separate MDM workshop/ training sessions for the Principals/ MDM in-charge. Information in the state MIS is not disseminated to the implementing agencies i.e. the school level officers and used properly. The MDM-in-charge were absent in two schools visited : Sarvodaya Kanya Vidyalaya, Defence Colony and Government Boy's Senior Secondary School. There is one in-charge for both primary and upper primary level in 75 per cent of double shift schools.

Engagement of cook-cum-helpers

The mission noticed that the Govt. of Delhi has not engaged any of the 18740 cook-cum-helpers already approved by the Programme Approval Board for MDM. Since, Mid-Day Meals is provided in all schools through Centralized kitchen and thus the service providers have engaged helpers from their own resources in schools for serving the meals to children. However, the number of these helpers is found inadequate in the sampled schools. Social composition of helpers was found satisfactory as all the helpers are from weaker sections of society. They, however, require training in hygiene and sanitation in discharge of their work. Helpers reported they received a meager amount of Rs. 500/- per month as remuneration in cash.

The mission is informed that the Govt. of Delhi is in process of the approved number of cook-cum-helpers and these cook-cum-helpers will be engaged by June, 2013.

The mission strongly recommends that since service providers have already engaged helpers, the State may assign the responsibility of engaging the approved number of cook-cum-helpers for cooking and serving the mid-day meal to children as per the norms under MDMS to the respective NGOs.

ROLE OF THE TEACHERS:

Apart from the engagement of the home science teachers of every school in the overall supervision of the MDM, teachers should take cognisance of the complaints of the students on the food distributed, behavior of the helpers and make sure that students who do not eat breakfast or bring filled tiffins from home get adequate MDM portions. None of the teachers at the DOE and DCB could tell the quantity of cooked meal to be given at the Primary and Upper Primary Level.

On interaction, none of the teachers in any of the schools surveyed could tell us the Platters of students in their class who eat breakfast or bring food from home.

Engagement of the home science teachers as in charge of MDM could not be reasoned out as they were not delegated any responsibility and had a limited understanding of the MDM norms – for calorific and nutrition norms, total quantity in grams given per child for both primary and upper primary level.

MONITORING MECHANISM:

The education officers at the zonal level are designated for monitoring and supervision of the scheme at ground level. However, it was also noted that the concerned officials were not even familiar of the norms under the scheme, in such scenario whatever inspections are taking place are not proving very effective. The mission noted that a roaster is prepared by the zonal offices for principals/teachers to visit respective kitchens for regular monitoring and inspections. The mission noted that there is no grievance redressal mechanism in place for the children, teachers or common people to register their complaints. The DCB had no records of the grievance or community/ department monitoring in place. The minutes of the

SMC meetings of these schools showed that no discussion on MDM was taken up, primarily because there was an acute lack of awareness at the school level.

Except in the Sarvodaya Kanya Vidyalaya (Zone III), no separate school-cum-zonal committee is constituted for inspection of the kitchens/ food suppliers. There is a separate proforma for inspection of kitchens of MDM which is to be filled either by the Principal or the MDM monitoring committee, visiting the kitchen. Nearly 40 per cent of the schools reported that there is no regular District or zonal level inspection conducted and 100 per cent schools could not provide us any record

of the inspection date, feedback and other details.

S.No.	Date	School ID	School's Name
1	01/04/2013	1003030	Khureji Khas-Alok Bharati Sec. School
1003025	06/04/2013	1003196	Chander Nagar-SKV
2	08/04/2013	1003033	Gandhi Nagar, No. 3-GGSSS
1003197	12/04/2013	1003013	Kailash Nagar-GGSSS
3	15/04/2013	1003034	Gandhi Nagar-DAV No. 1, GBSSS
			Krishna Nagar-SBV
			Gandhi Nagar No.2, GGSSS
			Gandhi Nagar-Guru Nanak GSSS

Plate 11: The composition of the MDM monitoring committee for inspection of kitchens in Zone III.

INVOLVEMENT OF COMMUNITY/ PARENTS

None of the visited school have a complete feedback register with parents signature certifying the quality and taste of food. In one school, Nigam Pratibha Vidyalaya (East Laxmi Market- MCD) parents complained that the school authorities have made them sign the registers without giving them to taste the food or giving them the reason to give their signatures/ thumb impression.

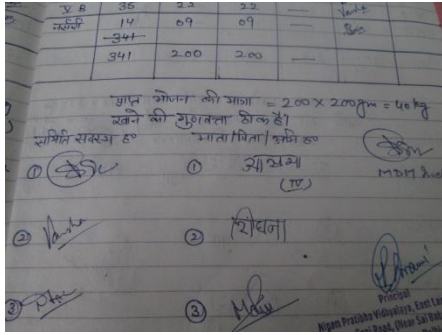


Plate 12: Parents are asked to sign in a blank page and details are filled after wards: as per testimony of the parents present in Nigam Pratibha Vidyalaya (5 in number).

Children of MC Primary Model School, Khichdipur Village, have reported that the female helper/ distributor do not distribute the whole food and keep some food with her which she carries with her. They complained that this leads to shortage of meal for them.

No tracking of the complaints can be done as the Principals and the MDM-in-charge could not provide with any copy of the complaints registered either in the zonal office or the supplier as none of the complaints are written and

each issue is settled telephonically.



It was also noted that as penalty imposed by the state governments in some of the kitchens/food suppliers 50 per cent of the payment has been made.

Plate 13: Copy of bill to the food supplier by the Zeenat Mahal School, Kamla Market.

FUND UTILISATION

The MME funds have not been allotted in the MCD schools surveyed – Nigam Pratibha Vidyalaya, Kamla Market and Nigam Pratibha Vidyalaya , Mayur Vihar, Government Boy’s Senior Secondary School, Badarpur. The Government Boy’s Secondary School, Defence Colony, reported that they are not well aware of the guidelines of the utilisation of the MME funds and has unutilized since 2011. No MME funds were released to the schools under Delhi Cantonment Board and request for additional funds have been put up before the Delhi Secretariat.

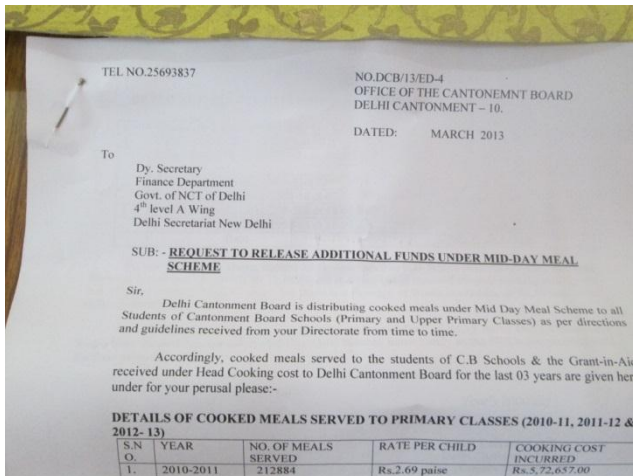


Plate 14: Letter to Delhi Secretariat from the Delhi Cantonment

None of the schools had any dish washing detergent, soap in the hand washing area of which the MME funds were claimed to be utilised by the school authorities.

From March 2012- March 2013 no funds of conversion cost (cooking cost) have been released to the food supplier by DCB.

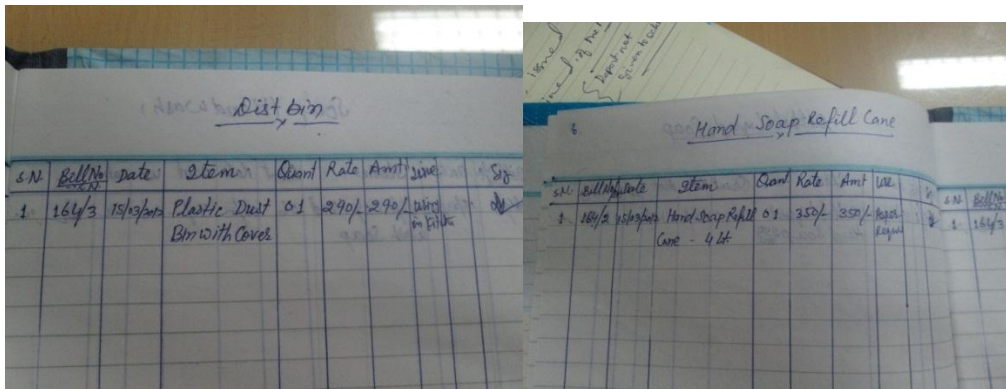


Plate 15: Records of the MME fund utilisation : Sarvodaya Kanya Vidyalaya- Chander Nagar

OBSERVATION: AT THE KITCHEN LEVEL

A. GENERAL OBSERVATIONS OF THE TEAM:

The Mission noted that MDM was served to all children in all schools through centralized kitchens. It must be ensured MDM programme must ensure that good quality food is provided to all school children as food is a human right for children to feed themselves in dignity, implying that sufficient food is available, there are means to access it, and that it adequately meets the individual's dietary needs. The **right to**

food protects the right of all children to be free from hunger, food insecurity and malnutrition.

B. REGULARITY IN DELIVERING FOOD GRAINS:

Mid-day meal suppliers of Directorate of Education (DOE) reported food grains are received in advance. However, newly engaged suppliers from 1st April 2013 did not received food grains from FCI. They purchase food grains from local market. Wheat is lifted from FCI godowns and taken to flour mills for grinding and Ground flour is then delivered at Kitchen store.

C. HUMAN RESOURCES: TRAINING, STAFFING AND HONORARIUM

No training of the cooks/ helpers and inspection of the kitchens were conducted by the District Education officer/ State Government official. There has been no common workshop conducted by the state government of all the food suppliers in Delhi, especially of the ones which have been opened barely a month ago (Blessing Society). The mission noted that there is no grievance

redressal mechanism and such regular (joint) workshops can help address the impending issues. In one kitchen – Jay Gee Humanatarian Society had no women cooks or helpers.



Plate 16: Directions for cooks painted on the walls of the kitchen: Jay Gee Humanatarian Society

D. INFORMATION DISPLAYED AT THE KITCHENS

Display of menu in kitchens:

The kitchens had the menu and safety & hygiene guidelines displayed on the walls

सूर्या चैरिटेबल एण्ड वेलफेयर सोसाइटी (रजि.)		दैनिक आहारिका	
सुबह		दोपहर	
सोमवार	पूरी-सब्जी	सोमवार	चावल-छोले
मंगलवार	चावल-दाल	मंगलवार	पूरी-सब्जी
बुधवार	पूरी-छोले	बुधवार	चावल-कढ़ी
गुरुवार	चावल-छोले	गुरुवार	पूरी-छोले
शुक्रवार	हलवा-चना	शुक्रवार	चावल-दाल
शनिवार	चावल-कढ़ी	शनिवार	हलवा-चना

Plate. 17: Menu displayed in the kitchen

The food supplier have mentioned that the quality of food grains supplied by the FCI are not as per the prescribed norms. Suppliers have also complained of excess of food/ wastage of food

due to average attendance/ previous day's attendance passed on to the suppliers.

E. INFRASTRUCTURE FACILITIES :

All the visited kitchens were semi-automated. The cooking and storage space is adequate, compartmentalised and the worker and cooking rules/ norms put up on the notice boards. The water filters were placed and the drainage and waste disposal mechanism was also in place. The ventilation in one kitchen (Jay Gee Humanitarian Society) was poor with exhaust fans not working properly, only one door opening, roof covered and insufficient lighting arrangements. Trimurti charitable Trust kitchen was well ventilated with fly catchers. At Ekta Shakti Foundation the food service unit, had all the areas well ventilated, exhaust fan were seen in the cooking area.

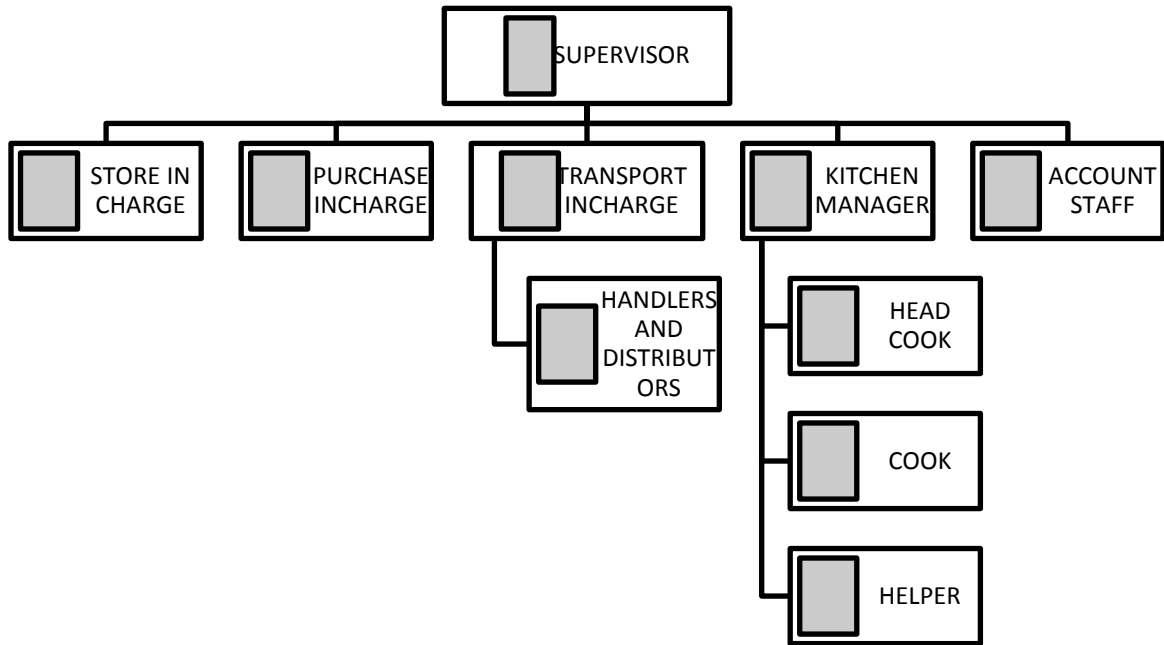


FIGURE 18: Organisation Structure -Surya Charitable Trust

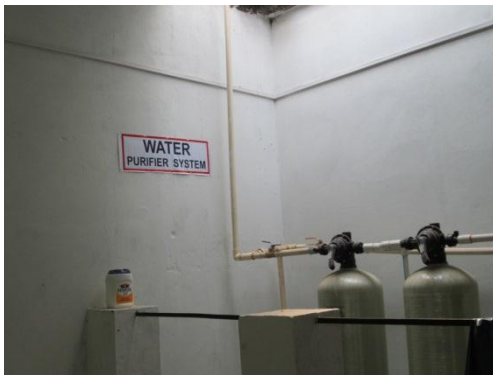


Plate 18:Water purifier- Blessing Society

The cleaning of Utensils at the centralized kitchen is to be done properly and regularly. It was observed in Blessing society kitchen that the Kadhai was not cleaned on regular basis and the carbon/tar from the *Kadhais* are not removed and the oil reused (four times as per response) for cooking, which is harmful for consumption and carcinogenic in nature. At Surya Charitable trust all the kitchen utensils were being washed with clean water (Potassium permanganate).



Plate 19: *Oil reused for frying pooris : Jay Ghee Humanitarian Society*



Plate 20: *Waste disposal*

F. SAFETY, HYGIENE AND HEALTH PROGRAMMES:

At the Kitchen Level: Though the semi-automated kitchens generally maintained cleanliness with regular water supply, however, in very few cases due to lack of space and the excess food collected and disposed at the same place where the cooking was done and poor ventilation, the food was exposed to insects/ flies. Newspapers were used for packing puris and halwa.



Plate 21: *Food packed in newspapers: Blessing Society*

Lapses in hygiene practices were noted in the manually operated kitchens



Plate 22: *Manual cooking practices in Blessing Society*

The owner/ manager of all the kitchens said that no workshop/ training was organized for them from the state government on the guidelines for preparation of food, kitchen norms and safety and hygiene conditions.

Food testing: The report of the results of the food sample done by one laboratory (Sri Ram Laboratory which was common for all Delhi kitchens) were not shared in any of visited kitchens. The food suppliers are not aware of the microbiological and nutritional parameters on which the food was tested. In absence of any follow ups viz. sharing of the reports and taking corrective actions, the purpose of scientific testing is incomplete.

G. HUMAN RESOURCES : TRAINING, STAFFING AND HONORARIUM

No training of the cooks/ helpers and inspection of the kitchens were conducted by the District Education officer/ state government official. There has been no common workshop conducted by the state government of all the food suppliers in Delhi, especially of the ones which have been opened barely a month ago (Blessing Society). The suppliers informed that there is no grievance redressal mechanism and such regular (joint) workshops can help address the impending issues.

The honorarium for the cooks-cum-helpers of the suppliers kitchens (both manual and semi automated) shall also be recorded at the kitchen level MIS and roster shall be maintained. Currently no records of the salary of the cooks/ helpers are maintained at the kitchen level.

CHAPTER: 6

RECOMMENDATIONS AND SUGGESTIONS

i) MENU AND RECIPES

- a) It was noted that nutritionally the meals were not balanced. While some of the meals were providing adequate amount of carbohydrates and fats (energy giving foods), they were lacking in proteins (body building foods), vitamins and minerals (protective and regulatory foods).
- b) Two sets of 10-12 day cyclic nutritionally balanced menu need to be developed according to seasonal availability of foods. This would minimize food cost and at the same time ensure maximum nutrition.
- c) Recipes for quantity food production of each dish should be standardized. Such standardized recipes should be provided to each NGO/kitchen supervisor.
- d) The portion size of each dish to be served to primary and upper primary students should be standardized and this information should be communicated to all school authorities. The size of the serving ladle should be standardized and such ladles should be provided to each school.
- e) The use of hydrogenated fat (such as vanaspati) should be completely banned in the preparation of meals including halwa because they contain trans fats which increase the risk of heart diseases. Only refined oils (rich in mono unsaturated fatty acids) such as rice bran, soybean, corn, safflower, sunflower, groundnut and mustard oils should be used for food preparation.
- f) Use of iron, calcium and vitamin 'A' rich vegetables should be encouraged. Easy availability, accessibility and incorporation of such (preferably) seasonal vegetables should be facilitated by the state.
- g) Use of seasonal low cost unconventional foods should be promoted. Home Science based colleges may be involved for developing and popularizing such recipes.
- h) Fermented or sprouted foods must be incorporated at least once a week.

- i) Mid day meal scheme should be extended up to class Xth because adolescence is the second opportunity to achieve development milestones.

ii) SETTING UP OF MANAGEMENT STRUCTURE AT STATE, DISTRICTS, SUB-DISTRICTS LEVELS:

- a) Setting up of State Mid Day Meal authority headed by Review Mission.
- b) Filling up of posts on deputation/contractual basis.
- c) Providing mobility facilities to the officers at various levels.
- d) Provision of CUG mobile connection to the officials
- e) A separate wing within the MDM cell to act as a coordinating agency of the implementing agencies viz. DOE, MCD, NDMC and DCB to streamline the activities and cross learning experiences.
- f) Appointment/Engagement of Nutrition and Food Safety Officer (NFSO):
One, Nutrition and Food Safety Officer (NFSO) must be appointed/engaged in each district who should further be assisted by Deputy Nutrition and Food Safety Officers (DNFSO). The minimum qualification for NFSO should be masters in foods and nutrition/social work. DNFSO's should be graduates in home science with post graduate specialization in social work or nutrition. The NFSO would be responsible for overall monitoring of mid day meal programme related activities of the district in all schools. Each DNFSO would be responsible for the conduct, monitoring and evaluation of mid day meal programme in ten schools. Counseling of students on social issues as well as moral, nutrition and health education shall be carried out by these officers. They would also conduct training programmes for kitchen personnel involved with the preparation of mid day meals.

III) FOOD SAFETY:

- a) All kitchens must follow the principles of HACCP (Hazard Analysis Critical Control Point) to ensure that compromised quality food products are not prepared and food related hazards do not occur.

- b) Insulated transportation vans or Insulated containers should be used by the food suppliers so that food temperature can be maintained above 70°C which would minimize the risk of microbial contamination during transportation and storage.
- c) Safe drinking water must be used for food preparation. A suitable water purification system must be available in all kitchens.
- d) The primary (bulk) containers should be preferably sterilized before packing food. This would minimize the risk of food infection outbreaks especially during rainy season.
- e) Insect and fly trappers must be installed near all doors and windows of the kitchen. All windows and doors should have wire mesh.
- f) A duty roaster for periodic cleaning of kitchen fixtures/equipment etc. must be prepared and put up on a wall outside kitchen.
- g) During frying oil abuse should be avoided. Oil should be used only once for frying. Thereafter, it should be sieved and stored in airtight translucent containers in a cool place. This oil should be used for cooking purpose as soon as possible.
- h) All beneficiaries and food handlers associated with mid day meal scheme must wash their hands before and after handling food.

IV) CAPACITY BUILDING AND TRAINING:

- a) Training programmes need to be organized for principals/MDM-in-charge kitchen managers and other employees at regular intervals. Each training programme should be monitored and evaluated for its effectiveness. Training programmes should include:
 - Concept of Good Manufacturing Practices (GMP) and Hazard Analysis Critical Control Point (HACCP).
 - Importance of correct cooking practices to ensure conservation and enhancement of nutrients in food.
 - Proper cleaning and garbage disposal

- Grooming, personal hygiene and safety of personnel in work place.
- b) Periodic feedback may be obtained from the stakeholders and other concerned officials/teachers who are engaged at the grass root level.
 - c) Community mobilisation efforts need to undergo a qualitative shift by taking RTE norms into consideration whereby communities are also empowered to monitor the implementation of mid-day-meal scheme. In this context, the SMC training needs to be very different from the usual training for VEC in the past and the training module need to be conceptualized comprehensively. This training of SMC should also reflect specific needs and concerns of mid-day-meal scheme. The Mission recommends that Department of Education and SPD, SSA may include SMC training module for Mid Day Meal scheme also in the training module of SMC.
 - d) Training module and material for imparting training to functionaries at various levels and cook-cum-helpers may be organized in consultation with corporate bodies under Corporate Social Responsibility (CSR).
 - e) The curriculum for source books for primary and upper primary levels is prepared by NCERT. The State should now ensure that a chapter on mid-day meal scheme is included in the text books of all classes of elementary school.

V) STRENGTHENING OF MONITORING

- a) Use of the Management Information System (MDM-MIS) launched by MHRD.
- b) Exposure visit - Inter-State exposure visits for officials of State Government should be mandated to enable them to learn best practices on MDM followed in other States.
- c) Inspections by the officials-It is noted that the scheme is not properly monitored at State, District and Zonal level, specific goals may be assigned to DDEs, and EOs, for making surprise inspections of the schools

and centralized kitchens. At least 25% schools under their jurisdiction may be inspected by these functionaries during each quarter. The copy of their inspection report may be submitted to the Director (Education), Govt. NCT of Delhi.

- d) Setting up of State Review Mission to review the Scheme in a district on bi-annual basis.
- e) Introduction of social audit mechanism of the Scheme.

vi) Publicity

- a) Adequate advocacy of the scheme with use of an IEC campaign in the State to highlight the scheme, its norms so as to bring in a component of community ownership of the scheme.
- b) MDM logo should also be exhibited prominently in the school and kitchens.
- c) The entitlements of children under MDMS and daily menu should be displayed prominently on the outside wall of the schools.
- d) The best performing school at zonal, district and State level must be awarded.

vii) Financial Aspects

- a) **Engagement of cook-cum-helpers:** The State may assign the responsibility of engaging the approved number of cook-cum-helpers for cooking and serving the mid-day meal to children as per the norms under MDMS to the respective NGOs. Distribution of food to the beneficiaries should be the responsibility of the service providers i.e. mid day meal kitchen employees. The role of school authorities should be of supervisory level.

- b) The payment to NGOs should be regular without any delay and if there is any issue it needs to be resolved immediately.
- c) Schools may be provided funds if there is space to set up the kitchen.
- d) Provision of transportation charges for carrying meals to school should be made.
- e) The State should provide eating plates and spoons to the children. This would facilitate proper serving of meals and facilitate feeling of social equality.
- f) Salary norms for the workers at centralized kitchens should be fixed and funds should be provided to the respective kitchens.
- g) The reports of the lab tests have not been shared or even informed to the schools and the zonal educational officers. It is submitted directly to the Department and no information of the results of the tests are shared thereafter.

viii) Management Information System

- a) The State should take immediate remedial measures to ensure timely feeding of data in to the portal. To ensure timely data entry MME funds can be utilised and data entry can be out sourced as is the case in Bihar.

ix) Maintenance of Records:

- a) In no school health cards were maintained for Greater convergence is required with School Health Programme. Individual health card records of each student should be maintained.
- b) Standardization of meal card should be maintained by all the implementing agencies of state.
- c) Tracking mechanism of MDM card should be in place.

X) Grievance Redressal Mechanism (GRM)

- a) Setting up of Grievance Redressal cell at various levels.
- b) Suggestion box / complaint register should be kept at a convenient place in the school to enable the visitors to give their suggestion and views for improving the scheme.
- c) A toll free number may be installed for lodging complaints and giving suggestions and it may be widely publicized.
- d) Use of MIS system in online registration of complaints of the stakeholders and its redressal.

Social perspective: The Right to Food

Food should be served with dignity to all children, preferably while the child is seated in the class room or the way we have food during our social functions. As already proposed, each child can be served the food in properly cleaned tiffin boxes (cleaning to be done by the helpers at school level) kept under the charge of the school authorities; however, the spoons and napkins can be issued to the children who shall be responsible for their cleaning and maintenance.

The State government needs to make arrangements for providing each student with a stainless steel tiffin box and a spoon for serving and consuming mid-day meals. Each tiffin box should have the MDMS logo and serial number engraved on it. This would facilitate proper serving of meals and facilitate feeling of social equality. As a pilot project, a few schools may be selected wherein each student is also provided with a napkin to dry her(is) hands after washing. This would help to inculcate the habit of washing hands before and after consuming meals.

Diagram. Of the **sample/ proposed tiffin is given below.** Approximate Dimensions of the tiffin can be --5.5 inches (length) X 4.0 inches (width) X 2.5 inches (height).

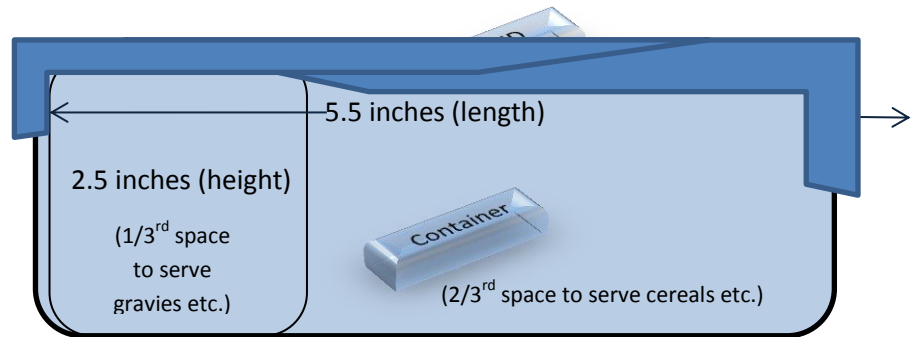


Figure :19 sample/ proposed tiffin

The Mission proposes effective implementation of the suggestions and recommendations along with a strong emphasis on regular monitoring and evaluation as well as grievance redressal.

On the whole, the Mid Day Meal Scheme has made strident improvements in the physiological, social and mental well-being of our school children; and it is expected to continue doing so for our future generations with greater efficiency and much better impact.

Dr Vandana Sabarwal

Ms Pallavi Nayek

Shri T.K.Singh

Dr Sukhneet Suri

Ms Surindra Jain

Shri Radha Krishan

Dr Madhu Teotia

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(Mission Leader)

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4. Malik S and Suri S. To study the Nutrition and Cognitive Status of School Children. MSc Dissertation. 2012.
5. Report of the Joint visit to the Food suppliers Kitchen by the MCD and NFI officials. Nutrition Foundation of India, 2003-04.
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Annexure - 1

List of Schools and Centralized Kitchens visited during the visit

1. Kautilya Government Sarvodaya Vidyalaya
2. GSK –Sarvodaya Kanya Vidyalaya, Defence Colony
3. Government Boy’s Senior Secondary School, Kalkaji
4. GBSSS, Varun Marg Defence Colony
5. Sister Nivedita SKV
6. GBSS School No ,2 Badarpur
7. GBSS School No ,3 Badarpur
8. Government Co-ed Senior Secondary, Matiala Village
9. Government Boy’s Senior Secondary School, No 2, Kalkaji New Delhi
10. Sarvodaya Bal Vidhyalaya Kalkaji No 1 , Veer Savarkar
11. GSR SKV, Defence Colony
12. MCPA School,Janta Quarter,Paschim Pur
13. Sarvodaya Bal Vidyalaya - SBV-B4,Paschim Vihar
14. Sarvodaya Kanya Vidhyalaya,B-3, Paschim Vihar
15. Govt Sarvodaya Co Edu , Vidyalaya ,B4 ,Paschim Vihar
16. Govt Boys Sr. Secondary School , Narayana
17. Amar Shahid Major Shehrawat Sarvodaya Vidyalaya , Mahipal Pur
18. JBSS, JJ Camp Narayana
19. Sarvodaya Kanya Vidyalaya, Narayana
20. Shahid Captain Verma, Govt Ket Sarviodaya Vidyalays, Inderpuri
21. Government Sarvodaya Bal Vidyalaya, Deen Dayal Upadyaya Marg
22. N.P. Middle School, Gole Market
23. N.P. Senior Secondary School, Gole Market
24. Zeenat Mahal School, Kamla Market
25. Sarvodaya Kanya Vidyalaya, Haveli Azam Khan School
26. Sarvodaya Kanya Vidyalaya- Chander Nagar Delhi- 51
27. Nigam Pratibha Vidyalaya, East Laxmi Market
28. MC Primary Model School, Khichdi village

29. RSBV Trilok Puri
30. Nigam Pratibha Vidyalaya, Mayur Vihar
31. Cantonment Board Secondary School, Sadar Bazaar, Delhi Cantt.
32. Cantonment Board Senior Secondary School, DID Line, Delhi Cantt.

Kitchens Visited:

1. Surya Charitable and Welfare society
2. Trimurti charitable society
3. Jaygee Humanitarian Society, Sayedullah Jaab
4. M/s Blessing Society, 14/34, Second Floor, TrilokPuri, Delhi
5. Maître research foundation
6. Cancer care research foundation
7. M/s.Bharat Rattan Dr. Bhim Rao Ambedkar, Dalit Uttan Evom Shiksha Samiti
B-66, Kondli, Sabji Mandi, Delhi-96
8. Suparbhat Education and Social Welfare Society
9. Stri Shakti
10. Ekta Shakti Foundation
11. M/s Manjeet Educational & Social Welfare, A103, Lajpat Nagar, ND.
12. REWARDS, Burari
13. M/s Ujjwal Savera Samiti, B/63A, Sec-3, Rajinder Nagar, Gaziabad, UP

Sample Size for Focus Group Discussions:

1. Government Sarvodaya Bal Vidyalaya: 25 students (Class III-VIII)
2. N.P. School Secondary School: 13 students in Class III + 31 students in Class VIII
3. Zeenat Mahal School: 13 students in Class VI and 22 students in Class VIII
4. Sarvodaya Kanya Vidyalaya, Haveli Azam Khan: 10 students in Class V and Class VI AND 7 students in Class VIII
5. Sarvodaya Kanya Vidyalaya, Chander Nagar: 10 students in Class VIII and 12 students in Class III.

6. Nigam Pratibha Vidyalaya, East Laxmi Market: 25 students in Class V
7. MC Primary Model School: Class V- 13 students
8. RSBV Trilok Puri- Class VII and Class VIII- 8 students
9. Nigam Pratibha Vidyalaya- students in Class III- 25 students
10. Government Boy's Senior Secondary, Defence Colony- Class VII - 12 students
11. Cantonment Board Secondary School, Sadar Bazaar, Delhi Cantt.- Class VII-27 students

Trends of Enrolment, Attendance and Aailed MDM

S.No	District Name	Name of School	Type of Schools	Primary /Upp.Primary/Pry with U.Pry.	Enrolment	No of children Present in last 10 days of Visit	Total Children Aailed MDM (last 10 days)	Average Attendance	Average Children Aailed MDM	% of children aailed to enrollment	% of children aailed to Attendance	Days of Disruption
1	South Delhi	Govt SBV, Matiala	DOE	Upper Primary	880	7274	7274	727	727	83%	100%	No Disruption
2	South Delhi	Sister Nivedita SKV, Defence Colony	DOE	Primary with Upper Primary	470	3469	3469	347	347	74%	100%	No Disruption
3	South Delhi	GBSS School No ,2 Badarpur	DOE	Upper Primary	628	3730	3730	373	373	59%	100%	No Disruption
4	South Delhi	GBSS School No ,3 Badarpur	DOE	Upper Primary	1251	7851	7851	785	785	63%	100%	No Disruption
5	South Delhi	Kautilya SBV ,Chirag Enclave	DOE	Upper Primary	707	4891	4891	489	489	69%	100%	No Disruption
6	South Delhi	GBSSS, No 2, Kalkaji ND	DOE	Upper Primary	535	1105	1105	111	111	21%	100%	5
7	South Delhi	Veer Savarkar ,SBV,Kalkaji No 1	DOE	Primary with Upper Primary	500	1314	8795	131	880	176%	669%	No Disruption
8	South Delhi	GSR SKV, Defence Colony	DOE	Primary with Upper Primary	696	5646	5646	565	565	81%	100%	No Disruption

S.No	District Name	Name of School	Type of Schools	Primary /Upp.Primary/Pry with U.Pry.	Enrolment	No of children Present in last 10 days of Visit	Total Children Availed MDM (last 10 days)	Average Attendance	Average Children Availed MDM	% of children availed to enrollment	% of children availed to Attendance	Days of Disruption
9	West Delhi	MCPA School,Janta Quarter,Paschim Pur	North_DMC	Primary	600	3772	3772	377	377	63%	100%	No Disruption
10	West Delhi	Sarvodaya Bal Vidyalaya - SBV-B4,Paschim Vihar	DOE	Primary with Upper Primary	990	7282	7282	728	728	74%	100%	No Disruption
11	West Delhi	SKV,B-3, Paschim Vihar	DOE	Primary with Upper Primary	380	2730	2730	273	273	72%	100%	No Disruption
12	West Delhi	Govt Sarvodaya Co Edu , Vidyalaya ,B4 ,Paschim Vihar	DOE	Primary with Upper Primary	1007	7290	7290	729	729	72%	100%	No Disruption
13	West Delhi	MCD Pratibha Primary School, A-4, Paschim Vihar	North_DMC	Primary	557	3634	3634	363	363	65%	100%	No Disruption
14	West Delhi	MCD Primary School ,Jwala Heri,Paschim Vihar	North_DMC	Primary	1042	4744	4744	474	474	46%	100%	No Disruption
15	East Delhi	SKV, Chander Nagar	DOE	Primary with Upper Primary	410	2822	2188	282	219	53%	78%	No Disruption
16	East Delhi	SBV,Trilokpuri,Block 20	DOE	Primary with Upper Primary	1190	10945	10874	1095	1087	91%	99%	No Disruption
17	Central Delhi	SKV,Haveli Azam Khan , Asif Ali Road	DOE	Primary with Upper Primary	167	987	987	99	99	59%	100%	No Disruption
18	Central Delhi	Zeenat Mahal -GBSSS, Kamla Market	DOE	Upper Primary	274	1195	1195	120	120	44%	100%	No Disruption
19	Central Delhi	SBV,Rouse Avenue , Din Dayal Upadhyay	DOE	Primary with Upper Primary	508	3464	3464	346	346	68%	100%	No Disruption

S.No	District Name	Name of School	Type of Schools	Primary /Upp.Primary/Pry with U.Pry.	Enrolment	No of children Present in last 10 days of Visit	Total Children Availed MDM (last 10 days)	Average Attendance	Average Children Availed MDM	% of children availed to enrollment	% of children availed to Attendance	Days of Disruption
20	East Delhi	Nigam Pratibha Vidyalaya, East Laxmi Nagar, Patpat Ganj Road	East_DMC	Primary	351	3166	3166	317	317	90%	100%	No Disruption
21	East Delhi	EDMC Primary School , Khichripur	East_DMC	Primary	403	2678	2678	268	268	66%	100%	No Disruption
22	East Delhi	M C Primary School, A1 Block, Mayur Vihar	East_DMC	Primary	466	2957	2957	296	296	63%	100%	No Disruption
24	New Delhi	N P Bengali Girls Sr. Sec School, Gole Market	NDMC	Primary with Upper Primary				0	0	#DIV/0!	#DIV/0!	No Disruption
25	South West Delhi	N P Middle School , Gole Market	NDMC	Primary with Upper Primary	340	2827	2827	283	283	83%	100%	No Disruption
26	South West Delhi	Govt Boys Sr. Secondary School , Narayana	DOE	Upper Primary				0	0	#DIV/0!	#DIV/0!	No Disruption
27	South West Delhi	Amar Shahid Major Shehrawat Sarvodaya Vidyalaya , Mahipal Pur	DOE	Primary with Upper Primary	1927	13229	13229	1323	1323	69%	100%	No Disruption
28	South West Delhi	Govt Boys Sr. Sec School, JJ Camp Narayana	DOE	Upper Primary	474	3025	1421	303	142	30%	47%	No Disruption
29	South West Delhi	Sarvodaya Kanya Vidyalaya, Narayana	DOE	Primary with Upper Primary	1443	7788	7788	779	779	54%	100%	No Disruption
30	South West Delhi	Shahid Captain Verma, Govt Ket Sarviodaya Vidyalaya, Inderpuri	DOE	Primary with Upper Primary	1361	7787	7787	779	779	57%	100%	No Disruption

S.No	District Name	Name of School	Type of Schools	Primary /Upp.Primary/Pry with U.Pry.	Enrolment	No of children Present in last 10 days of Visit	Total Children Availed MDM (last 10 days)	Average Attendance	Average Children Availed MDM	% of children availed to enrollment	% of children availed to Attendance	Days of Disruption
31	South West Delhi	C B Secondary School ,Sadar bazar,Delhi Cant.	DCB	Primary with Upper Primary	539	2920	2920	292	292	54%	100%	No Disruption
32	South West Delhi	DID Line Sr. Sec School , Gopinath Nagar , Delhi Cant	DCB	Primary with Upper Primary	482	2669	2669	267	267	55%	100%	No Disruption

Display of Menu and MDM Logo

S.No	District Name	Name of School	Type of School	Primary /Upp.	Menu		MDM Logo
					Displayed		Dispalyed or not
					Yes / No	Location	Yes/No
1	South Delhi	Govt SBV, Matiala	DOE	Upper Primary	Yes	On the wall	Yes on the wall
2	South Delhi	Sister Nivedita SKV, Defence Colony	DOE	Primary with Upper Primary	Yes	On the wall	Yes on the wall
3	South Delhi	GBSS School No ,2 Badarpur	DOE	Upper Primary	Yes	On the wall	Yes on the wall
4	South Delhi	GBSS School No ,3 Badarpur	DOE	Upper Primary	Yes	On the wall	Yes on the wall
5	South Delhi	Kautilya SBV ,Chirag Enclave	DOE	Upper Primary	Yes	On the Wall	Yes
6	South Delhi	GBSSS, No 2, Kalkaji ND	DOE	Upper Primary	No	On the Wall	No
7	South Delhi	Veer Savarkar ,SBV,Kalkaji No 1	DOE	Primary with Upper Primary	Yes	On the Wall	Yes
8	South Delhi	GSR SKV, Defence Colony	DOE	Primary with Upper Primary	Yes	On the Wall	Yes
9	West Delhi	MCPA School,Janta Quarter,Paschim Pur	North_DMC	Primary	No	No	No
10	West Delhi	Sarvodaya Bal Vidyalaya - SBV-B4,Paschim Vihar	DOE	Primary with Upper Primary	Yes	On the Wall	No
11	West Delhi	SKV,B-3, Paschim Vihar	DOE	Primary with Upper Primary	Yes	On the Wall	No
12	West Delhi	Govt Sarvodaya Co Edu , Vidyalaya ,B4 ,Paschim Vihar	DOE	Primary with Upper Primary	Yes	On the Wall	No
13	West Delhi	MCD Pratibha Primary School, A-4, Paschim Vihar	North_DMC	Primary	No	No	No
14	West Delhi	MCD Primary School ,Jwala Heri,Paschim Vihar	North_DMC	Primary	No	No	No

S.No	District Name	Name of School	Type of School	Primary /Upp.	Menu		MDM Logo
					Displayed		Displayed or not
					Yes / No	Location	Yes/No
15	East Delhi	SKV, Chander Nagar	DOE	Primary with Upper Primary	Yes	On School Wall	Yes
16	East Delhi	SBV,Trilokpuri,Block 20	DOE	Primary with Upper Primary	No	No	No
17	Central Delhi	SKV,Haveli Azam Khan , Asif Ali Road	DOE	Primary with Upper Primary	No	No	No
18	Central Delhi	Zeenat Mahal -GBSSS, Kamla Market	DOE	Upper Primary	No	No	Yes but not proper
19	Central Delhi	SBV,Rouse Avenue , Din Dayal Upadhyay	DOE	Primary with Upper Primary	No	No	Yes
20	East Delhi	Nigam Pratibha Vidyalaya, East Laxmi Nagar, Patpat Ganj Road	East_DMC	Primary	Yes	In Principal's room	No
21	East Delhi	EDMC Primary School , Khichripur	East_DMC	Primary	Yes	In Principal's room	No
22	East Delhi	M C Primary School, A1 Block, Mayur Vihar	East_DMC	Primary	Yes	In Principal's room	No
23	New Delhi	N P Bengali Girls Sr. Sec School, Gole Market	NDMC	Primary with Upper Primary	Yes	In Principal's room	NO
24	South West Delhi	N P Middle School , Gole Market	NDMC	Primary with Upper Primary	No	No	Yes
25	South West Delhi	Govt Boys Sr. Secondary School , Narayana	DOE	Upper Primary	No	No	Yes
26	South West Delhi	Amar Shahid Major Shehrawat Sarvodaya Vidyalaya , Mahipal Pur	DOE	Primary with Upper Primary	No	No	No
27	South West Delhi	Govt Boys Sr. Sec School, JJ Camp Narayana	DOE	Upper Primary	No	No	No

S.No	District Name	Name of School	Type of School	Primary /Upp.	Menu		MDM Logo
					Displayed		Dispalyed or not
					Yes / No	Location	Yes/No
28	South West Delhi	Sarvodaya Kanya Vidyalaya, Narayana	DOE	Primary with Upper Primary	No	No	No
29	South West Delhi	Shahid Captain Verma, Govt Ket Sarviodaya Vidyalaya, Inderpuri	DOE	Primary with Upper Primary	No	No	No
30	South West Delhi	C B Secondary School ,Sadar bazar,Delhi Cant.	DCB	Primary with Upper Primary	No	No	No
31	South West Delhi	DID Line Sr. Sec School , Gopinath Nagar , Delhi Cant	DCB	Primary with Upper Primary	Yes	Wall	No
32	South West Delhi	DID Line Sr. Sec School , Gopinath Nagar , Delhi Cant	DCB	Primary with Upper Primary	Yes	Wall	No

Annexure -4

Details of Infrastructure Facilities

S.No	District Name	Name of School	Type of School	Primary /Upp.primary	Infrastructure Facilities							Fire Extinguisher	Remarks
					Toilet Facilities				Drinking Water				
					Yes/No	Boys and Girls		Common	Yes/No	If yes			
Girls	Boys	For all Purposes	Only Drinking										
1	South Delhi	Govt SBV, Matiala	DOE	Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
2	South Delhi	Sister Nivedita SKV, Defence Colony	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
3	South Delhi	GBSS School No ,2 Badarpur	DOE	Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	But Not Sufficient Water - Provision done through Community Participation
4	South Delhi	GBSS School No ,3 Badarpur	DOE	Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
5	South Delhi	Kautilya SBV ,Chirag Enclave	DOE	Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
6	South Delhi	GBSS, No 2, Kalkaji ND	DOE	Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
7	South Delhi	Veer Savarkar ,SBV,Kalkaji No 1	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
8	South Delhi	GSR SKV, Defence Colony	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	

S.No	District Name	Name of School	Type of School	Primary /Upp.primary								Fire Extinguisher	Remarks
					Toilet Facilities				Drinking Water				
					Yes/No	Boys and Girls			Yes/No	If yes			
						Girls	Boys	Common		For all Purposes	Only Drinking		
9	West Delhi	MCPA School,Janta Quarter,Paschim Pur	North_DMC	Primary	Yes	Yes	Yes		Yes	Yes		Yes	
10	West Delhi	Sarvodaya Bal Vidyalaya - SBV-B4,Paschim Vihar	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
11	West Delhi	SKV,B-3, Paschim Vihar	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
12	West Delhi	Govt Sarvodaya Co Edu , Vidyalaya ,B4 ,Paschim Vihar	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
13	West Delhi	MCD Pratibha Primary School, A-4, Paschim Vihar	North_DMC	Primary	Yes	Yes	Yes		Yes	Yes		Yes	
14	West Delhi	MCD Primary School ,Jwala Heri,Paschim Vihar	North_DMC	Primary	Yes	Yes	Yes		Yes	Yes		Yes	
15	East Delhi	SKV, Chander Nagar	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
16	East Delhi	SBV,Trilokpuri,Block 20	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
17	Central Delhi	SKV,Haveli Azam Khan , Asif Ali Road	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
18	Central Delhi	Zeenat Mahal -GBSSS, Kamla Market	DOE	Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
19	Central Delhi	SBV,Rouse Avenue , Din Dayal Upadhyay	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
20	East Delhi	Nigam Pratibha Vidyalaya, East Laxmi Nagar, Patpat Ganj Road	East_DMC	Primary	Yes	Yes	Yes		Yes	Yes		Yes	
21	East Delhi	EDMC Primary School ,	East_D	Primary	Yes	Yes	Yes		Yes	Yes		Yes	

S.No	District Name	Name of School	Type of School	Primary /Upp.primary								Fire Extinguisher	Remarks
					Toilet Facilities				Drinking Water				
					Yes/No	Boys and Girls		Common	Yes/No	If yes			
Girls	Boys	For all Purposes	Only Drinking										
		Khichripur	MC										
22	East Delhi	M C Primary School, A1 Block, Mayur Vihar	East_D MC	Primary	Yes	Yes	Yes		Yes	Yes		Yes	
23	New Delhi	N P Bengali Girls Sr. Sec School, Gole Market	NDMC	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
24	South West Delhi	N P Middle School , Gole Market	NDMC	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
25	South West Delhi	Govt Boys Sr. Secondary School , Narayana	DOE	Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
26	South West Delhi	Amar Shahid Major Shehrawat Sarvodaya Vidyalaya , Mahipal Pur	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
27	South West Delhi	Govt Boys Sr. Sec School, JJ Camp Narayana	DOE	Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
28	South West Delhi	Sarvodaya Kanya Vidyalaya, Narayana	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
29	South West Delhi	Shahid Captain Verma, Govt Ket Sarviodaya Vidyalaya, Inderpuri	DOE	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
30	South West Delhi	C B Secondary School ,Sadar bazar,Delhi Cant.	DCB	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
31	South West Delhi	DID Line Sr. Sec School , Gopinath Nagar , Delhi Cant	DCB	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	
32	South West Delhi	DID Line Sr. Sec School , Gopinath Nagar , Delhi Cant	DCB	Primary with Upper Primary	Yes	Yes	Yes		Yes	Yes		Yes	

Coverage under School Health Programme and Inspections Carried out

Annexure : 5

S.No	District Name	Name of School	Type of School	Primary /Upp.	Coverage under SHP		Inspection carried out
					Yes/No	* Health card available in school	Yes/Not
1	South Delhi	Govt SBV, Matiala	DOE	Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
2	South Delhi	Sister Nivedita SKV, Defence Colony	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
3	South Delhi	GBSS School No ,2 Badarpur	DOE	Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
4	South Delhi	GBSS School No ,3 Badarpur	DOE	Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
5	South Delhi	Kautilya SBV ,Chirag Enclave	DOE	Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM

S.No	District Name	Name of School	Type of School	Primary /Upp.	Coverage under SHP		Inspection carried out
					Yes/No	* Health card available in school	Yes/Not
6	South Delhi	GBSSS, No 2, Kalkaji ND	DOE	Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
7	South Delhi	Veer Savarkar ,SBV,Kalkaji No 1	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
8	South Delhi	GSR SKV, Defence Colony	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
9	West Delhi	MCPA School,Janta Quarter,Paschim Pur	North_DMC	Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
10	West Delhi	Sarvodaya Bal Vidyalaya - SBV-B4,Paschim Vihar	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
11	West Delhi	SKV,B-3, Paschim Vihar	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM

S.No	District Name	Name of School	Type of School	Primary /Upp.	Coverage under SHP		Inspection carried out
					Yes/No	* Health card available in school	Yes/Not
12	West Delhi	Govt Sarvodaya Co Edu , Vidyalaya ,B4 ,Paschim Vihar	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
13	West Delhi	MCD Pratibha Primary School, A-4, Paschim Vihar	North_DMC	Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
14	West Delhi	MCD Primary School ,Jwala Heri,Paschim Vihar	North_DMC	Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
15	East Delhi	SKV, Chander Nagar	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
16	East Delhi	SBV,Trilokpuri,Block 20	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
17	Central Delhi	SKV,Haveli Azam Khan , Asif Ali Road	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM

S.No	District Name	Name of School	Type of School	Primary /Upp.	Coverage under SHP		Inspection carried out
					Yes/No	* Health card available in school	Yes/Not
18	Central Delhi	Zeenat Mahal -GBSSS, Kamla Market	DOE	Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
19	Central Delhi	SBV,Rouse Avenue , Din Dayal Upadhyay	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
20	East Delhi	Nigam Pratibha Vidyalaya, East Laxmi Nagar, Patpat Ganj Road	East_DMC	Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
21	East Delhi	EDMC Primary School , Khichripur	East_DMC	Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
22	East Delhi	M C Primary School, A1 Block, Mayur Vihar	East_DMC	Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
23	New Delhi	N P Bengali Girls Sr. Sec School, Gole Market	NDMC	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM

S.No	District Name	Name of School	Type of School	Primary /Upp.	Coverage under SHP		Inspection carried out
					Yes/No	* Health card available in school	Yes/Not
24	South West Delhi	N P Middle School , Gole Market	NDMC	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	Yes	Yes but not specific to MDM
25	South West Delhi	Govt Boys Sr. Secondary School , Narayana	DOE	Upper Primary	Yes Under Chacha Nehru Health Prog.	Yes	Yes but not specific to MDM
26	South West Delhi	Amar Shahid Major Shehrawat Sarvodaya Vidyalaya , Mahipal Pur	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
27	South West Delhi	Govt Boys Sr. Sec School, JJ Camp Narayana	DOE	Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
28	South West Delhi	Sarvodaya Kanya Vidyalaya, Narayana	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
29	South West Delhi	Shahid Captain Verma, Govt Ket Sarviodaya Vidyalaya, Inderpuri	DOE	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM

S.No	District Name	Name of School	Type of School	Primary /Upp.	Coverage under SHP		Inspection carried out
					Yes/No	* Health card available in school	Yes/Not
30	South West Delhi	C B Secondary School ,Sadar bazar,Delhi Cant.	DCB	Primary with Upper Primary	Yes Under Chacha Nehru Health Prog.	No	Yes but not specific to MDM
31	South West Delhi	DID Line Sr. Sec School , Gopinath Nagar , Delhi Cant	DCB	Primary with Upper Primary	Yes	Yes	Yes But no t specific to MDM
32	South West Delhi	DID Line Sr. Sec School , Gopinath Nagar , Delhi Cant	DCB	Primary with Upper Primary	Yes	Yes	Yes But no t specific to MDM