Teachers' Perception Regarding the Impact and Performance of Mid- Day Meal Scheme in Sangrur District of Punjab

* Kanchan Rani ** Pardeep Jain

Abstract

The Government of India, both at the Centre and State levels, has been playing an important role in quantitative and qualitative expansion of education. The Mid-Day Meal Scheme is one of the main schemes which has been launched by the Central Government of India with a view to enhance enrollment, retention, attendance, and simultaneously improving nutrition level among students. The present study has been carried out with the aim to examine teachers' perceptions regarding quality and quantity aspects of the Mid-day Meal Scheme and to analyze the impact of the Mid-Day Meal Scheme on the health of the students in three educational development blocks in Sangrur district of Punjab. For this research, data were collected from 103 schools. One teacher per school associated with the Mid-Day Meal Scheme was interviewed using a pre-designed questionnaire. It was found that the majority of the teachers had a positive attitude regarding the impact and performance of the Mid-Day Meal Scheme. They were satisfied with the quality and quantity of food provided to the students. In addition, the teachers were of the opinion that this scheme has given a positive direction to the health and learning ability of the underprivileged students by eliminating class room hunger.

 $\textit{Keywords:} \ education, mid-day \ meal \ scheme, impact, health, enrollment, \ food \ quality, food \ portions$

JEL Classification: I20, I28, I38

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ducation is essential for the success of the democracy, for improving productivity, and for bringing about desirable changes for social as well as national development. In 1946, the international community charged UNESCO with the responsibility for promoting education throughout the world due to its vital importance to individual and social well-being. In 1948, the United Nations in Paris proclaimed the Universal Declaration of Human Rights, including the Right to Education (Mohanty, 2008). Universalization of Elementary Education (UEE) has been accepted as a national goal. In pursuance of the constitutional directive and the need for a provision of elementary education as crucial input for national building, the National Policy on Education, 1986, as revised in 1992, staged that free and compulsory education of satisfactory quality should be provided to all children up to the age of 14 years. The National Policy on Education (1986) has emphasized the need for overall development of young children. It states, "Recognizing the holistic nature of child development, that is, nutrition, health and social, mental, physical, moral, and emotional development. Early childhood care and education will receive high priority and be suitably integrated with Integrated Child Development Programme, wherever possible" (Goel, 2008). Free and compulsory education to all children up to the age of fourteen years is a constitutional commitment in India. The Government of India has started a number of programmes to achieve the goal of universalization of elementary education (UEE) among which the Sarva Shiksha Abhiyan (SSA), launched in 2001, is the most recent one. It aimed at achieving universal primary education by 2007 and universal elementary education by 2010 (Mehta, 2006).

In the year 2000, the goal of universal elementary education was reviewed at the World Education Forum (U.N. World Conference) at Dakar, Senegal. The representatives of more than 160 countries adopted an ambitious framework for action aimed at expanding learning opportunities for children, youth, and adults. The framework is pledge to achieve six "education for all" (EFA) goals. The Dakar promise extends from early childhood care and

^{*} Assistant Professor, Department of Business Management, Sri Guru Granth Sahib World University, Fatehgarh Sahib - 140 406, Punjab. E-mail:-kanchan 1682@gmail.com

^{**} Professor, Department of EDP and Humanities, Sant Longowal Institute of Engineering and Technology, Longowal, Punjab.

education (ECCE) and universal primary education (UPE) to gender equality, the spread of adult literacy, the expansion of skills programme for youth and adults, and improvements in the quality of education by 2015 (EFA Global Monitoring Report, 2008).

Table 1. Trend of Literacy Rate in India from 1951-2011

Census Year	Persons	Decadal Increase	Males	Females	Gender Gap
1951	18.33		27.16	8.86	18.30
1961	28.33	9.97	40.40	15.35	25.05
1971	34.45	6.15	45.96	21.97	23.99
1981	43.57	9.12	56.38	29.76	26.62
1991	52.21	8.64	64.13	39.29	24.84
2001	64.83	12.62	75.26	53.67	21.59
2011	74.04	9.21	82.14	65.46	16.68

Source: Adapted from B. Maulick (2011). Literacy trends in the country. *Yojana*, 55 (July 2011). 34 – 37.

Growth of Education in India

The Table 1 shows the literacy trend in India from 1951 to 2011. In a span of fifty years, that is, from 1951 (18.33%) to 2001 (64.83%), there has been only a marginal increase of 46.5% in the literacy rate. From 1951 to 2001, female literacy showed a mere 44.7% increase, which is only five times for the whole point. According to the 2011 Census, out of 77.04% of the literacy rate, the corresponding figures for males and females are 82.14% and 65.46% respectively, which means four out of every five males and two out of the every three females of the age of seven and above are literate in the country. A significant milestone of Census 2011 was that the total number of illiterates came down from 30.4 crore in 2001 to 27.2 crore in 2011, showing a decline of 3.1 crore (Maulick, 2011).

In spite of these changes, issues like high dropout rates, low level learning achievement, and low participation of girls and the disadvantaged section of the society remain a matter of concern in India. Poor girls and members of scheduled castes and scheduled tribes still face formidable barriers in acquiring basic education. To overcome these barriers, the Government of India has initiated a number of programs to achieve the goal of universalization of elementary education in a time-bound manner. Some major initiatives are the Non- Formal Education, District Primary Education Programme, the Mid-Day Meal Scheme, and the Sarva Shiksha Abhiyan. Most recently, the Govt. introduced the Right to Education, which came into effect from April 1, 2010, ensuring free education to more than 92 lakh school children (Government of India, Annual Report, 2009-10).

Need of the Mid-Day Meal Scheme for Education

India has the second largest education system in the world after China. The scale of operations involved to ensure quality of education for all in the country is unique and challenging (Hazra, 2011). In India, the percentage of children below five years of age who are underweight is 42.5% as compared with 4% in Brazil and 6% in China (Sharma, 2011). Childhood malnutrition and poor health are two of the greatest barriers to EFA. Progress in both areas has lagged far behind progress in getting into schools. The upshot is that millions of children entering school have had their brains, their cognitive development, and their education potential permanently damaged by hunger and ill health. The first is child health. One in three children below the age of 6 years in the developing world will start primary school with their bodies, brains, and long-term learning prospects permanently damaged by malnutrition and ill health. This has important but widely ignored implications for education. When so many children entering school have had their lives blighted by sickness and hunger, improved access alone is not a secure foundation for education for all (EFA Global Monitoring Report, 2008).

The 'Extent of Chronic Hunger and Malnutrition in India', presented before UN Human Rights Council in Geneva found that India has the largest number of undernourished people in the world, the highest level of child malnutrition with over 47% underweight children and over 46% stunted in their growth, even higher than most countries in poverty stricken sub-Saharan Africa (Jakhar & Siwach, 2010). India is home to 57 million malnourished Indian children. 45.2

million children are engaged in labour, and 8.1 million children are out of school. It is estimated that child malnutrition is responsible for 22% of the country's diseased, affecting productivity and income (UNICEF, National Commission for Enterprises in Unorganized Sector (NCEUS) as cited in Ghanashyam, 2012). These statistics revealed that there is a pressing need for a strong and sustained programme to tackle the interlinked problem of malnutrition and education. India's Mid-day Meal Programme, which was conceived to address the above-mentioned problems, is the world's largest feeding programmme reaching out to about 12 crore children in over 12.65 lakh schools/EGS(education Guarantee Scheme) across the country (www.mdm.nic.in as cited in Ghanashyam, 2012).

Mid - Day Meal Scheme (MDMS) in India: Outlay and Achievements

The Government in India, both at the Centre and State levels, has been playing an important role in quantitative and qualitative expansion of education (Singh, B. & Singh, M. 2010). The Mid-Day Meal Scheme is one the main schemes which has been launched by the Central Government with a view to enhancing enrollment, retention, attendance, and simultaneously improving the nutrition level among students. The National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched as a centrally sponsored scheme on August, 15, 1995 in 2408 blocks of the country. Under the order dated November 28, 2001 of the Supreme Court, this became a cooked Mid-day Meal Scheme under which every child of government and government assisted primary schools was to be served with a minimum content of 300 calories and 8-12 grams of protein per day. In 2002, this scheme was extended to cover children in the Education Guarantee Scheme (EGS) and Alternative Innovative Education (AIE) centers. In October 2007, the scheme was extended to cover children of upper primary classes (VI-VIII) with nutritional norms fixed at 700 calories and 20 grams of protein. In April 2011, the cooking cost per child per school was ₹ 2.89 for primary classes and ₹ 4.33 for upper primary classes (Government of India, Annual Report, 2010-11). As 19.4% of our population falls in the age group of 7-14 years of age (according to our last census), it means that almost one fifth of our population theoretically should come under the noon meal scheme. So, it is a milestone achievement for the Govt. of India to strengthen a link between health and education.

As per the annual work plan and budget (2008-09) of the Mid -Day Meal Scheme for all 35 States/UTs, the total number of children covered under this scheme were 8,23,90,147 at the primary level, and 3,50, 42,987 at the upper primary level (Hira, 2010). Under the Mid -Day Meal Scheme, a total budget provision of INR 48000.00 crore had been allocated by the Planning Commission, Government of India during the 11th five-year plan (Government of India, Annual Report, 2010-11). One of the main objectives of the Mid -Day Meal Scheme is to promote education among the underprivileged section of the society. Punjab has a high concentration of scheduled caste population, that is, 28.9%, which is one of the highest in the country. Hence, the present study is focused on the state of Punjab in India.

Table 2. Achievements of the Mid-Day Meal Scheme During the Period from 2005-06 to 2011-12

Components	2005-06	2006-07	2007-08*	2008-09*	2009-10*	2010-11*	2011-12*
Children covered (in Cr.)	11.94	10.68	11.37	11.19	11.36	10.46	10.35 (upto 30.09.12)
Food grain allocated (in lakh MTs)	22.51	21.6	24.79	29.30	27.71	29.40	29.09
Budget allocation (in Cr.)	3345.26	5348.00	6678.00	8000.00	7359.15	9440.00	10380.00
Total Exp.(in Cr.)	3186.33	5233.47	5835.44	6688.02	6937.79	9128.44	7697.24
							(upto 29.12.11)

^{*}Primary and Upper Primary combined

Source: Adapted from Government of India (2012). Annual Report 2011-12. Department of School Education & Literacy and Department of Higher Education, Ministry of Human Resource Development.

The Table 2 reveals the achievements of the mid-day meal scheme during the period from 2005-06 to 2011-12. According to the current scenario, in the year 2011-12, a total of 10.35 crore students (upto September 2012) had been covered under the scheme. To run the scheme, 29.09 MTs of food grain and ₹ 10380 crore had been allocated by the government. Till December 2011, an amount of ₹ 7697.24 crore had been spent by all the States to implement the scheme.

Objectives of the Study

The present research had been undertaken keeping in mind the following objectives:

- 1) To examine the teachers' perception regarding the quality and quantity aspects of the mid-day meal scheme.
- 2) To analyze the impact of the mid-day meal scheme on the health of the students.

Sample Framework and Methodology

To achieve the abovementioned objectives, primary data was collected from Sangrur district of Punjab. Punjab is an agrarian state, with agriculture as the main occupation, though the inhabitants are good entrepreneurs. Over 80% of the land in Punjab is cultivated. Major crops grown in Punjab include wheat, rice, sugarcane, and cotton. Punjab is a predominantly rural (66%) state. As per the Census 2011, the total population of Punjab state was 27704236 (Government of Punjab, Sarva Shiksha Abhiyan Authority, Demographic profile, n.d.), and the literacy rate of the state was 76.7%. Punjab is divided into 20 administrative districts (2 more new districts have been constituted), 72 tehsils and 216 educational development blocks. The literacy rate of SC females was 48.2%. Mansa district of Punjab had the lowest literacy rate (62.8%) and Hoshiarpur had the highest literacy rate (85.4%) (Government of Punjab, Sarva Shiksha Abhiyan Authority, Educational profile, n.d.). The Mid - Day Meal Scheme covered 22.23 lakh children in Punjab (1354626 at the primary level, and 868849 at the upper primary level) (Government of Punjab, Sarva Shiksha Abhiyan Authority. Salient features of Mid-day – Meal of Punjab, n.d.).

The Sangrur district is divided into 11 educational development blocks having 68.9% literacy rate. For the present study, three blocks of Sangrur district (Lehragaga, Cheema, and Sunam) had been selected. The sample consisted of 103 both primary and upper primary schools. The participants in the research were teachers who were associated with the implementation of the mid-day meal scheme in the schools. Respondents of 103 schools (one teacher per school) were interviewed with the help of a pre-designed and pre-tested questionnaire schedule. The interview schedule covered the information related to the profile of the institutes, quality and quantity related indicators of the mid-day meal scheme, and impact of the MDMS on the health status of the students after the launch of the Mid-day Meal Scheme. The field work was carried out in the abovementioned district of Punjab from February 2011 to June 2011.

Table 3. Profile of the Surveyed Schools

S. No.	Characteristic	Total No. of		Percentage	
	Surveyed	Number Schools			
1	Type of School	103	Primary	67	65%
			Upper Primary	36	35%
2	Area of School	103	Rural	94	91.30%
			Urban	9	8.70%
3	Block of School	103	Lehragaga	51	50.00%
			Cheema	29	28.40%
			Sunam	23	21.60%
4	Number of Teachers	103	2-5	64	62.10%
			6-10	21	20.60%
			11-15	11	10.60%
			16 and Above	7	6.70%
5	No. of Years of Running the	103	9-10 Years	24	23%
	Mid-Day Meal Scheme		7-8 Years	38	37%
			5-6 Years	7	7%
			4 or less than 4 Years	34	33%

Source: Personal Field Survey

Table 4. Performance Indicators of Quality and Quantity of Food Served in the Schools

Factors		Total No. of Schools Surveyed	Number	Percentage
Meals Provided to Children Daily	Yes	103	82	79%
	No		21	21%
Children Getting Different Menu for Meals	Yes	103	103	100.00%
	No		0	0%
Quality of Food Served	Average	103	34	33%
	Good		63	61.10%
	Satisfactory	,	6	5.90%
Students Like All Food Items	Yes	103	57	55%
	No		46	45%

Source: Personal Field Survey

Analysis and Discussion

The Table 3 depicts the profile of the sample surveyed schools in which 65% of the schools belonged to the primary (I-V classes) level and 35% of the schools belonged to the upper primary (VI-VIII classes) level. 91.3% of the schools were located in the rural area, and 8.7% schools were located in the urban area. The study was conducted in three blocks of Sangrur district, and Lehragaga is the largest educational block in the district, where maximum number of schools are located. 50% of the schools were from Lehragaga block and the remaining 28.4% and 21.6% were from Cheema and Sunam blocks respectively. 62.1% of the surveyed schools had 2-5 teachers and 20.6% of surveyed schools had 6-20 teachers. Only 6.7% of the schools had more than 16 teachers, but the number of teachers varied from school to school as per the schools' requirement, and number of students enrolled in the school. Although as per the order of the Supreme Court, cooked mid-day meals had to be provided in schools since 2001, but Punjab state could not follow the same order due to paucity of funds. Hence, it was observed that 23% of the schools have been running the scheme from the last 9-10 years, and 37% of the schools had been running the scheme from the last 7-8 years. The Mid-day Meal Scheme was implemented for the upper primary level schools from 2007-08. 33% of the schools belonged to the upper primary level, and had been running the scheme since the past four years.

As per the Table 4, 79% of the surveyed school teachers responded that the mid-day meal was served daily and 21% of the teachers responded that the mid-day meal was not served every day. They revealed various reasons for these irregularities. The teachers told us that they used to stop serving the meals only when there was a shortage of funds (to cover the cooking cost) and supply of food grains was obstructed. 100% of the teachers reported that the students were getting the meal as per the menu decided by the State Government. 33% of the teachers mentioned that the quality of food served in the schools was average; while 61% of the teachers mentioned that the food was of good quality. The teachers reported that they used to supervise the preparation of food and helped in buying the material for cooking food items like grocery items, green vegetables, and so on. Most importantly, the teachers mentioned that they used to taste the food every day before serving it to the students. 55% of the teachers reported that the students relished the food served to them in the schools, and 45% of the teachers informed us that the students disliked some of the food items served to them according to menu decided by Government (the students reported that they disliked sweet rice, and wanted salted rice with vegetables (*pulao*) instead of the sweetened rice.).

As is evident from Table 5, 95.1% teachers reported that the students were satisfied with the quantity of food served to them. Students at the primary level were served 100 grams of food grains per day and students at the upper primary level were served 150 grams of food grains per day at the time of the survey. Teachers at both levels (primary and upper primary) responded that the quantity of food served to the students was sufficient for a one time meal. Only 4.9% of the teachers were not satisfied with the quantity of food served to the students. The teachers who were not satisfied with the quantity of food given to the children were of the opinion that children at a growing age require more quantity of food. Furthermore, the table also depicts the health problems faced by the students in schools and shows the improvement in their health after the implementation of the Mid-day Meal Scheme. 38.8% of the teachers informed us that the students were quite healthy and did not suffer from any health problems. 61.2% of the teachers

Table 5. Impact of MDMS on the Health Status of the Students

Factors		Total no. of Schools Surveyed	Percentage
Quantity of Meal Sufficient	Yes	98	95.10%
	No	5	4.90%
Students Facing Health Problems	Yes	40	38.80%
	No	63	61.20%
	No problem	63	61.20%
Types of Health	Only Low Weight	5	4.90%
Problems Faced by	Only Low HB	3	2.90%
the Students	Only Malnutrition	3	2.90%
	only Anaemic	2	1.90%
	Others (Like poor eye-sight, skin related problems, etc.)		18.44%
N	Iultiple Problems(low weigh low HB, poor eyesight, skin related problems)	t, 8	6.70%
Visits of Doctor	Yes	86	83.50%
	No	17	16.50%
Number of Visits by Doctors	No Visits	17	16.50%
	Every Month	4	3.90%
	Once in 2 Months	3	2.90%
	Once in Three Months	7	6.80%
	Once in 6 Months	37	35.90%
	Once in 9 Months	3	2.90%
	Annually	32	31.00%
Maintenance of Medical Check-up F	Records Yes	86	83.50%
	No	17	16.50%
Positive Change in Health of Studen	ts Yes	60	57.30%
	No	43	42.70%
Type of Change in Health of Student	s No Change	43	42.70%
	Only Increase in Weight	30	29%
	Only Increase in HB	0	0%
Or	ity 2	1.90%	
I	8	7.70%	
Increas: In	g ability 12 in HB 8	11.6% 7.70%	
8	& increase in Learning ability	/	
Students Asked to Wash Hands Befo	re Meal Yes	98	95.10%
	No	5	4.90%

Source: Personal Field Survey

told us that the students were facing a number of health problems, out of which, the percentage of malnourished and anaemic children was very low. The main health problems faced by the students were poor eye sight, skin related problems, low weight, and low HB. It was found that doctors were visiting most of the schools; only teachers in 16.5% of the schools reported that the doctors did not visit their schools. However, 35.9% of the sample schools informed us that a team of doctors visited the schools once in 6 months, and 31% of the schools reported that a team of doctors

visited their school(s) annually. 86% the teachers used to maintain a record of the doctors' visits, and a majority of them observed favorable changes in the health of the students. The teachers reported that there was an increase in the weight of the students as well as in their learning ability. In addition, for spreading awareness about personal hygiene, teachers of 95.1% of the schools used to instruct the students to wash their hands before having their food.

Conclusion

Physical development and cognitive development of children is hampered due to lack of sufficient food and nutrition. The Mid-day Meal Programme implemented at the national level has been successful in eliminating classroom hunger as a majority of the sample teachers reported that the meal available at the schools was adequate for the children. It was revealed by approximately one fourth of the surveyed teachers that there were irregularities in releasing of funds for the Mid-day Meal Prograame, and due to lack of funds, at times, they were unable to provide the meals in their schools. To solve this problem (obstruction in supply of food grains and food items), there should be proper coordination among the supplier of the mid-day meal ration and the school staff. For proper implementation of the scheme, officials from different departments associated with MDMS like Departments of Health, Nutrition, Education, Revenue/Rural Development, Civil Supplies, Finance, and so forth, should be made aware of their specific roles with an emphasis on the need to work in tune with the other departments. A large proportion of the teachers (in sample schools) were of the opinion that the meals provided were of good quality. In addition, the teachers emphasized that the students need to be taught about good hygiene and cleanliness - like washing their hands before and after having their meals.

Research Implications

This study on the perception of teachers with reference to the Mid-Day Meal Scheme pointed out the need for further improvement in basic facilities for the implementation of the said scheme in schools -such as providing proper supply of food grains, releasing of funds on time, organizing timely visits by the doctors, and replacement of some of the food items in the menu which were disliked by the students. These problems need to be firmly resolved for greater success of Mid-Day Meal Scheme.

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