



## **IMPACT OF MID DAY MEAL SCHEME ON QUALITY DIMENSIONS OF PRIMARY EDUCATION**

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### **Abstract**

*The present study has been designed with the purpose to find out the impact of Mid Day Meal Scheme on Enrolment, Attendance, Retention and learning out come of students of Government primary schools, Government aided primary schools and EGS centres of Ferozepur District. For this purpose, data related with enrolment, attendance, retention and academic achievement of students was taken from school record and percentage rise was calculated by comparing no meal (NM), uncooked meal (UM) and cooked meal (CM) times. Data related with initiative behaviour and socio metric status of students was collected by administering A Scale for Rating Initiative and a self prepared socio metric scale on students of mid day meal area and non mid day meal area. It was found that mid day meal scheme has positive impact on enrolment, attendance, retention and learning out come of students. The study also concluded that this scheme is very beneficial for improving social interactions that can develop a feeling of brotherhood among children and will ultimately lead to the development of National Integration.*



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## **INTRODUCTION**

Primary Education plays a pivotal role for mass literacy and provides a solid foundation for higher education. It is the stage when foundation of a child's over all development is laid. A building whose foundation is not strong can not survive the thunders of time. If a child is properly looked after at primary stage, his further education gets a fillip. So, to make this foundation stone strong, or to make education universal, Government of India launched many programs from time to time like Resolution of Government on National Policy on Education (NPE) (1986), Non Formal Education (NFE), Operation Blackboard (OB), Minimum Level of Learning (MLL), District Primary Education Programme (DPEP), Bihar Education Project (BEP), Lok Jumbish, Mid Day Meal Scheme (MDM) and Sarva Shiksha Abhiyan (SSA).

Mid Day Meal Scheme:- In order to improve enrolment, retention and reduce drop out rate of students in primary classes and also to improve nutritional status of primary school students, Government of India, launched a countrywide scheme, National Program of Nutritional Support to Primary Education (NP-NSPE)-(Mid Day Meal Scheme) on 02-10-1995 (effective from 15-08-1995). Under this scheme, students of primary classes were to be

provided wheat @3kg per student per month (for 10 months in a year) subject to 80% attendance. And later on the States were to switch over to cooked meal scheme within two years but, like many other states, Punjab could not switch over to cooked meal scheme inter-alia. It was not due to paucity of funds alone but also due to sheer lack of bureaucratic will. Under this scheme, foodgrains (wheat and rice) are provided free of cost by Central Government along with Transport subsidy of Rs.50 per quintal, cooking cost and essential infrastructure. Then, the scheme was revised in 2004 to provide cooked mid day meal with 300 calories and 8-12 grams of protein to all children studying in class-I-V in Government, Government Aided Primary Schools and EGS/AIE Centres with a cooking cost @Rs.1/- per child per school day, transport subsidy of Rs.100 per quintal for special category States and Rs.75 per quintal for other States besides Management and Monitoring costs @2% of the cost of foodgrains, transport subsidy and cooking assistance. Provision of mid day meals during summer vacation in drought affected areas was also made. Due to some of the difficulties faced in implementing MDM-2004, the scheme was again revised in 2006; In this scheme the calories were raised from 300 to 450 and protein contents from 8-12 gm to 12 gm with adequate quantities of micronutrients like iron, folic acid and vitamin-A etc, with increased cooking cost of Rs.2 per child per day (Rs.1.80 per child per school day paid by Central Government and 20 paise by the State Government) with a provision of assistance for constructing kitchen-cum-store @Rs.60,000 per unit and Rs.5000 for kitchen devices. Local bodies implement NP-NSPE at the state level. The Central Government provides free food grains from FCI. Allotment is based on enrolment figures obtained from States and Union Territories. The Central Government also offers a transport subsidy to the State Government. NP-NSPE can also be run by NGOs. Some states use parallel structure (such as through Deputy Collector). Others use Gram Panchayats or Parent Teacher Bodies or Local Women's Self Help Groups or NGOs. But, in case of NGOs, the union bears only running expenses, not infrastructure cost.

From the beginning till now mid day meal scheme became a matter of discussion for all the personnel concerned especially the teachers, parents of the students and administrators. Study of related literature reveals the views of investigators about the impact of this scheme on enrolment, retention and scholastic achievement. **Glewwe and Jacoby (1994)** found that malnourished children start school later and complete fewer years of school as compared to better nourished children. **Ahmed and Del Ninno (2002)** evaluated the Food For Education (FFE) programme in Bangladesh and found that due to this program there is increase in the

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enrolment of students and the increase in enrolment was greater for girls than boys. **Kherra, R. (2002)** reported that due to mid day meal scheme in Rajasthan, there is increase in enrolment of students by 23% (overall) and 36% for girls alone and attendance rate have also increased. **The Centre For Equity Studies, New Delhi (2003)** reported that provision of mid day meals at school was associated with 50% reduction in the number of out-of-school girls, class-I enrolment rose by 15% between July 2001 and July 2002 and this scheme contributed to socialization in a caste and class ridden society. It has been noticed that the experience of sharing a common meal helps erode caste prejudices and class inequalities. **Julia Blue (2005)** found that enrolment and attendance of students had increased due to provision of mid day meals. **Rajshri Jayaraman (2008)** found that the provision of a warm school lunch is associated with an approximately 8% increase in Class-I enrolment, while the aggregate trends shows the increase in enrolment associated with school lunches is 25%. **R.V. Baru (2008)** found that mid day meal scheme had made significant contributions to reducing classroom hunger and increasing school attendance especially of girl children. **Advancing Basic Education and Literacy (ABEL) Information Bulletin (1992)** found that children who receive nutritional supplements in schools have improved academic performance. **Pollit et al (1993)** concluded that children with better nutritional status were more likely to have higher cognitive test scores and better school performance than malnourished children. **Ambasht and Rath (1995)** found that mid day meals had impact on the achievement of students. **Chandler et al (1995)** found that after receiving breakfast, undernourished children performed significantly better on a test of verbal fluency. **Sarma et al (1995)** found that mid day meals are associated with a marginal improvement in the scholastic performance of students. **Del Rosso and Marek (1996)** found that healthier and better nourished children perform better than children suffering from malnutrition. **Methews (1996)** found that morning meal was strongly related to improved learning, memory and health of children and concluded that “provision of breakfast is a successful public health intervention that improves the internal efficiency of education systems”. **Alasingaperumal (2003)** reported that significant improvement due to mid day meals is that the pupils of all social backgrounds cheerfully sit together and share the same food. **Naik (2005)** revealed no discrimination was found with respect to serving and eating food on the basis of caste etc. **Mathur et al (2005)** found that cooked mid day meal had also contributed to the cause of social equity as children, cutting across caste and class lines sit together to share a common meal. **Kherra, R. (2006)** found that mid day meal scheme has large socialization and educational benefits.

## **RATIONALE OF THE PROBLEM**

Children are the future of our society and a society whose children are not healthy and educated can not progress with changing times. The concept of education has also changed. Education does not only mean intellectual development, it includes all aspects social, moral, emotional, ethical and above all physical development. Keeping all such aspects, education has been made free and compulsory upto the age of 14 years. Education at this level plays a significant role in educational reconstruction of the country. So, the main interest of Government is in the expansion of education with special reference to the most backward areas and most under privileged sections of the country. To improve quality of primary education and to promote enrolment of students especially for weaker sections of society i.e. SC/STs and landless labourers, variety of incentives are needed in the plans. Therefore, provision has been made for distribution of text books and stationery, mid day meal scheme, girls uniforms and attendance scholarships. Economic condition of parents is often considered as the main cause for non enrolment and non participation of young children in schools. The poor parents find it difficult to provide two meals per day. They, therefore stop their children from attending schools and make them busy in some vocations to supplement their income. But, it is unhuman to deprive children from school, who are economically weak. To solve this problem Government of India launched Mid Day Meal (NP-NSPE) scheme to attract the children with the objectives: -

“To give a boost to universalization of primary education by increasing enrolment, retention and attendance and simultaneously impacting upon nutritional status of students in primary classes.”

After more than 10 years of launch of the scheme, it is high time to know whether these objectives of the scheme have been actually achieved. So, to know to what extent these objectives have been fulfilled, the investigator planned to investigate the impact of mid day meal scheme on quality dimensions of primary education that i.e enrollment, attendance, retention and learning outcomes ( academic achievement, initiative and socio-metric status ) in the schools of District Ferozepur.

The positive results of the study will help in encouraging the parents of the students to send there wards to the government schools. The study will make it easy for the teachers to attract the students through food to school. Government and other organizations may extract the

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benefit from the conclusions of the study as Comptroller Auditor General (CAG) said in its performance audit report of the mid day meal programme that Human Resource Development (HRD) Ministry has failed in proper assessment, monitoring, data collection and ensuring proper infrastructure in schools implementing the scheme. The ministry, which started the programme with an aim to improve the status of primary education, is yet to assess the impact of the scheme with respect to the rise in enrolment, attendance and retention level of children “Neither the ministry nor the state governments have established or even attempted any system for measuring a direct relationship between increase in attendance and the mid day meal scheme despite the scheme delineating increase in attendance as a specific objective in guidelines upto 2004” (*Express News Service Oct 25, 2008*). After reviewing the literature it is found that not much research has been done in this area specially in Punjab. So the results of the study will help in bringing into notice of the government the positive impact of mid meal scheme .

#### **OBJECTIVES OF THE STUDY**

A research study must safeguard wastage of efforts on trivial or superficial investigation. The present study endeavours for the realization of the following objectives: -

1. To study the impact of Mid Day Meal Scheme on the enrolment of students in Government Primary Schools, Government Aided Primary Schools and EGS centres.
2. To compare the rise or fall in enrolment of students in Government Primary schools, Government Aided Primary Schools and EGS Centres.
3. To study the impact of Mid Day Meal Scheme on the attendance of students in Government Primary Schools, Government Aided Primary schools and EGS centres.
4. To compare the rise or fall in the attendance of students in Government Primary Schools, Government Aided Primary Schools and EGS centres.
5. To study the impact of Mid Day Meal Scheme on retention of students in Government Primary Schools, Government Aided Primary Schools and EGS centres.
6. To compare the retention of students in Government Primary Schools, Government Aided Primary Schools and EGS centres.
7. To study the impact of Mid Day Meal Scheme on academic achievement of students in Government Primary Schools, Government Aided Primary Schools and EGS centres.
8. To compare the initiative behaviour of the students of Mid Day Meal area and Non Mid Day Meal area.

9. To compare the sociometric status (social relations) of students of Mid Day Meal area and Non Mid Day Meal area.

### **HYPOTHESES OF THE STUDY**

Ho.1 There will be no significant impact of Mid Day Meal Scheme on the enrolment of students in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.2 There will be no significant difference in the rise or fall in the enrolment of students in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.3 There will be no significant difference in the rise or fall in the enrolment of students of different categories in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.4 There will be no significant difference in the rise or fall in the enrolment of students (Boys & Girls) in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.5 There will be no significant impact of Mid Day Meal Scheme on the attendance of students in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.6 There will be no significant difference in the rise or fall in the attendance of students in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.7 There will be no significant difference in the rise or fall in the attendance of students of different categories in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.8 There will be no significant difference in the rise or fall in the attendance of students (Boys & Girls) in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.9 There will be no significant impact of Mid Day Meal Scheme on retention of students in Government Primary School, Government Aided Primary Schools and EGS Centres.

Ho.10 There will be no significant difference in retention of students in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.11 There will be no significant impact of Mid Day Meal Scheme on the academic achievement of students in Government Primary Schools, Government Aided Primary Schools and EGS Centres.

Ho.12 There will be no significant difference in the initiative behaviour of students of Mid Day Meal area and non Mid Day Meal area.

Ho.13 There will be no significant difference in the sociometric status (social relations) of the students of Mid Day Meal area and Non Mid Day Meal area.

### **METHOD USED**

Descriptive and exploratory survey method was used.

### **SAMPLE**

By resorting to a combination of random sampling, convenient sampling and purposive sampling, the final composition of the sample was total number of students involved 300 of government primary schools, 300 of government aided primary schools, 300 of EGS centres and 300 of private schools.

### **TOOLS EMPLOYED**

For the purpose of data collection purpose, the following tools were used.

1. Performa to Record Enrolment of the Students (Self prepared )
2. Performa to Record Attendance of the Students (Self prepared )
3. Performa to Record Retention of the Students (Self prepared )
4. Performa to Record Academic Achievement Scores of the students. (Self prepared 5.  
A Scale for Rating 'Initiative' ( By Vandana Mehra 1986)
6. Socio-Metric Scale (Self prepared )

### **PROCEDURE FOR DATA COLLECTION**

For the purpose of collection of data to know the impact of mid day meal scheme on enrollment and attendance of students, four educational sub blocks were selected for Government Primary Schools, five educational sub blocks of district and six educational sub blocks were selected for Government Aided Primary Schools and EGS Centres respectively. Out of these educational sub blocks 20 Government Primary Schools, 20 Government Aided Primary Schools and 20 EGS centres were selected. Then, the investigator visited each school to get required information. First of all information related to the enrolment and attendance of students (from 2001-02 to 2007-08) was taken from the school records on Performa-1 and 2. To know the impact of mid day meal scheme on retention of students information related with total number of students enrolled in the beginning of the session, number of students dropped out and number of students retained upto final exams was taken from 2001-02 to 2007-08 on Performa-3. To know the impact of mid day meal scheme on learning outcome of students, academic results of students of all types of sample schools were taken from the

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school records for the year 2001-02 (No meal time) and 2007-08 (Meal time). To know the initiative behaviour of students, a scale for rating initiative of students was given to the concerned teachers to rate their students. A total 300 students were taken from Government Primary Schools (where mid day meal is given-MDM area) and 300 students from Private Schools (where mid day meal is not given Non-MDM area). To study the socio metric status relations of the students, a socio-metric scale was administered on the same number of students of Government Primary Schools (MDM area) and Private Schools (Non-MDM area), to know their choices.

### **STATISTICAL TECHNIQUES**

Keeping in view the type of the data and objectives of the study, the statistical techniques viz percentages were computed to test the hypotheses of the study.

### **FINDINGS AND CONCLUSIONS**

After analysing the data following conclusions were drawn

- Mid day meals have positive impact on enrolment of students of all classes, categories and gender in Government Primary Schools, Government Aided Primary School and EGS Centres of Ferozpur District.
- For all types of sample schools more rise in enrolment of students was seen when no meal and cooked meal (NM, CM) (B) (15.1% GPS), (39.45% GAPS), times were compared followed by UM and CM (C) (8.0% GPS), (22.9%GAPS), (21.2% EGS) and NM and UM (A) (6.5% GPS), (13.3% GAPS) times Comparison.
- When longitudinal comparison for Government Primary Schools, Government Aided Primary Schools and EGS centres was made, more rise in enrolment of students was seen for Government Aided Primary Schools (13.3% A, 39.4% B & 22.9% C) followed by EGS centres (21.2% C) and Government Primary Schools (6.5% A, 15.1% B & 8.0% C) during all the three times. In all types of sample schools more rise in enrolment was seen for SC category students followed by Gen and BC category students.
- Rise in enrolment was more for girls than boys for Government Primary Schools and EGS centres while for Government Aided Primary Schools, the rise was more for boys than girls.
- There is rise in attendance of students of all classes, categories and gender, due to mid day meals in Government Primary Schools, Government Aided Primary Schools and EGS centres or mid day meals have positive impact on attendance of students of Government Primary Schools, Government Aided Primary Schools and EGS centres.



- For all types of sample schools more rise in attendance was seen when no meal and cooked meal (NM & CM) times were compared (B) followed by uncooked meal and cooked meal (UM & CM) (C) and no meal and uncooked meal (NM and UM) (A) time comparison.
- More rise in attendance was for students of Government Primary Schools 7.0% (A), 22.4% (B) and 15.4% (C). For the students of Government Aided Primary Schools the rise was 5.5% (A), 20.2% (B) and 14.7% (C) and for EGS centres the rise was 14.3% (C).
- In all types of sample schools, the rise in attendance was almost of the same level for all the three categories i.e. General, SC and BC categories.
- The rise in attendance was more for girl students than boys in Government Primary Schools. It was more for boys than girls in Government Aided Primary Schools, and for EGS centres, this rise was almost of the same level for boys and girls.
- There is rise in retention of students (%age of students retained upto final exams) of all categories and gender in Government Primary Schools, Government Aided Primary Schools and EGS centres due to mid day meals.
- The retention was more for Government Aided Primary Schools (98.9%) followed by EGS centres (97.4%) and Government Primary Schools (94.2%) during cooked meal time.
- For all types of sample schools, retention was more for General category students followed by BC and SC categories.
- Girls showed more retention than boys in all types of sample schools.
- There is positive impact of mid day meals on the academic achievement of students in Government Primary Schools, Government Aided Primary Schools and EGS centres.
- The percentage of students securing A and B (i.e. higher grades) was more during meal time (MDM time) than non meal time (Non-MDM time) in all types of sample schools.
- During Non-MDM and MDM times, girls showed better academic achievement scores than boys.
- Mid day meals have positive impact on the initiative behaviour of the students. Students of mid day meal area (Government. Primary Schools) showed better score on score on Scale for Rating Initiative than the students of Non mid day meal area (Private Schools).
- Mid day meals have positive impact on the sociometric status of students. In the schools, where mid day meal is given, the number of stars (students-accepted by more students-showing good social relations) is more i.e. 58.3% than the schools where no mid day meal is given (33.3%) whereas the number of rejectees (Not accepted by other students) was more for Non-MDM schools (50%) than MDM schools (16.3%).

- No discrimination on the basis of caste, colour and creed is observed. The students learn to sit together, share food, share utensils and doing other activities with each other.

### **EDUCATIONAL IMPLICATIONS OF THE STUDY**

It is concluded from the present study that mid day meal scheme has positive impact on enrolment, attendance, retention and learning outcome of students. These results may prove very useful for students, teachers, parents of the students, administrators as well as the Government.

- Mid day meal scheme has contributed a lot in increasing enrolment, attendance, retention and learning outcome of the students in schools. Thus, the study will help in motivating more children to join schools.
- Nutritional development of children is one of the key factors responsible for the proper development of the child. If the children are fed properly, they pay more attention to studies and learn better. This further helps the child to understand the things in a better way.
- It is found in the study that the mid day meal scheme is very beneficial for improving social interactions among students, that can develop a feeling of brotherhood among children and will ultimately lead to the development of National Integration.
- The mid day meal scheme is very useful in decreasing the dropout rate and minimizing stagnation. The poor children usually leave the school due to poverty at home and when these children get food in school is no longer a burden on parents.
- After knowing the positive impact of mid day meal scheme, the parents will be motivated or encouraged to send their wards to Government schools. Mid day meal will also act as a supplement for their economy. Parents feel that the mid day meal scheme will help them to save atleast one time meal.
- The positive results like increase in enrolment, attendance, retention and learning outcome of students due to mid day meal scheme have proved to be a source of inspiration for the teachers. Teachers find it easy to motivate the children through food to school.

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