# Impact of Mid-Day Meal Programme on the Marginalized Children Social Development: Evidences from Mandya District, Karnataka 

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#### Abstract

Eradicating Hunger and providing universal education to all the citizens are the biggest challenges in developing countries. Almost all the countries in the world have adopted and implemented school feeding program to school going children in order to eradicate the hunger as well as to attract Marginalised children to schools. India has the largest child-population of the world. Majority of them are disadvantaged and belong to the families which are economically backward. They cannot afford good education and required Calories of food in day. To address this problem $86^{\text {th }}$ amendment of constitution has made free and compulsory education as a fundamental right for all children between the age group of 6-14 years. According to MDG, India has to achieve the goal of universal elementary education by the year 2015 along with the eradication of extreme poverty and hunger. The present study tries to make some contribution towards understanding social profile of the beneficiaries and Social Development Factors of beneficiaries. The study is descriptive in nature and the primary data for the study was collected using structured interview schedule among 150 student and 30 teachers' responds from government and government aided school of Nagamangala, Maddur, Malavally, Mandya (North and South), Panduvapura taluk and Srirangapatna. The study recommends that government and government aided school need to appoint an independent organizer other than the teacher because in those school where teachers have to self-monitor and supervise MDM where independent organizer is not employed MDM, such teacher feel MDM as the distractive force to their teaching activity.


Keywords: Eradicate Hunger and Universal Education, Marginalised Children, Mid-Day Meal Scheme (MDMs), Student Beneficiaries

## 1. Introduction

Themid-daymeal scheme is a flagship programme of Union Government of India for achievement of Universalization of Elementary Education (UEE). The history of MDMs traces back to the pre-independence era, when MDMs was introduced for the first time in British India in 1925 in the Madras Corporation by the British government. Later on the MDMs was introduced in the Union Territory
of Pondicherry by the French administration in 1930. But however, in the post-independence era in the year 196263 state government initiated MDMs at primary school to eradicate hungry among Children. The MDMs was introduced for the first time in the post-independence era by Tamil Nadu government under the Chief ministry of Thiru K. Kamaraj to increase the number of kids coming to school, this scheme was first initiated in Chennai then extended through-out state.

[^0]The government of India initiated the National Programme of Nutritional Support to Primary Education (NP-NSPE) on 15 August 1995. The objective of the programme was to improve the effectiveness of primary education by improving the nutritional status of primary school children. The scheme was initially implemented in 2,408 blocks of the country to provide lunch to students from classes one to five of government, government-aided and local body run schools. By 199798, the scheme was implemented across the country. The Supreme Court came up with an order in 2001 to provide fresh hot meals of appropriate nutritional value to the children between 6-14 years age group at all government schools and government aided schools across the country.

Under this programme, a cooked mid-day meal with 300 calories and 12 grams of protein is provided to all primary class children of government, governmentaided schools. The scheme also included upper primary class students from the class six to eight from October 2007 in 3,479 educationally backward blocks, and the name was changed from National Programme for Nutrition Support to Primary Education to National Programme of Mid-Day Meals in Schools. Though cooked food was to be provided, most of the states, apart from those already providing cooked food choose to provide dry rations to students where 3 kg of uncooked wheat or rice was provided to children with $80 \%$ attendance.

## 2. Mid-Day Meal Scheme in Karnataka

The Mid-Day Meal Scheme is a school meal programme initiated by the Government of India with an aim to improve the nutritional status, eradicate hunger and to provide universal education for school going children nationwide. This scheme supplies free lunches on working days for students in primary, middle and high school of government, government aided schools. MDMs were started in Karnataka with the partnership between state and union government. Initially the scheme was initiated in seven educationally backward North Eastern Districts like Bellary, Koppal, Raichur, Bidar, Bagalkote, Gulbarga
and Bijapur children of class 1 to 5 , the scheme was then extended to other districts of the state from July 2003. In Karnataka it is popularly known as Akshara Dasoha. Now the government of Karnataka provides hot cooked meals to all the children from class 1 to $10^{\text {th }}$ of government and government aided school.

## 3. Review of Literature

Many researches have been conducted in the study of impact of MDM on the beneficiaries of Mid-day meal scheme. Madhu Singh (2016) the purpose of the research was to study the attitude level of elementary school teachers towards Mid-Day Meal Scheme and also to investigate significance of difference in the attitude of teachers on the basis of gender, educational level and annual income. The sample of the study comprises of 327 Elementary School teachers of government schools in Bihar. The major findings of the study revealed significant difference in the attitude of the teachers on the basis of gender, the study also observed that teachers with intermediate level of education had more favourable attitude than the teachers who was postgraduated. But no significant difference was found on the basis of their annual income. M.L. Sharma and Geetesh Saini the study examined the performance of MDMP in Jaipur and also evaluated monitoring mechanism and contribution of various stakeholders at different levels in implementation of the programme in the sample state. The data for the study was collected mainly through primary source by employing interview schedule among 100 children of government school in Jaipur. The study revealed that MDMP was successful in removing classroom hunger, increasing enrolments and daily attendance among the sample beneficiaries. But however, several steps are yet to be taken to provide best quality of Mid-Day Meal to school children and also to improve the implementation of the programme. Rajeshwar Kadari and Sonal Mobar Roy (2016) the study attempted to strengthen Mid-Day Meal Program (MDMP) through the use of Management Information System (MIS). The study is based on secondary data. The authors in the study identify many drawbacks in the current system such as time lag in receiving the
data from school to state level which may leave scope for data manipulation/corruption/distortion, time lag in the present system of data flow which may lead in delay in taking remedial actions. Last non-availability of exception reports which leads to discrepancy in data reported. The study recommends for the implementation of MIS to enhance trustworthy and transparent in the system by making public information available on the domain. Tanika Chakraborty and Rajshri Jayaraman (2016) the paper attempted to study the effect of the world's largest school feeding program on children's learning outcomes. The data for the empirical study was retrieved from Annual Status of Education Report (ASER). The data was analysed by employing Heterogeneous Treatment Effects, robustness checks and person correlation. The study found that midday meals have a dramatic positive effect on learning achievement. The study also observed improvement in enrolment and nutrition level. Priyambada Shah (2017) the study attempts to understand the MDMS in India. The study was based on secondary data. The study revealed that MDMS succeeded in enhancing gender equality by bringing girl child into the school, liberated working women and generated employment opportunities (as cooks). But however, the study observed that the caste based discrimination continued during the meal times, the students were segregated on caste basis and the appointment of Dalits as cooks were opposed in certain areas.

## 4. Objectives of the Study

To study the social profile of student beneficiaries. To identify social development factors of Mid-Day Meal. Programme on the Marginalized Children.

## 5. Research Methodology

The study is descriptive in nature. The research mainly uses primary data collected among the student beneficiaries of MDMs and teachers of government and government aided school. According to Karnataka government reports, there are a total of 232 government and government aided schools in 7 taluks of Mandya district. 31 schools in Krishnaraja pet, 42 in Maddur,

39 in Malavally, 45 in Mandya (North and South), 28 Nagamangala, 25 Panduvapura and 22 in Sriranghapatna (school list n.d,). The data for the present study was collected from 2 government and government aided schools from each taluk namely Nagamangala, Maddur, Malavally, Mandya (North and South) and 4 government and government aided schools from each of Panduvapura and Sriranghapatna taluk based on purposive and convenience sampling technique.

### 5.1 Primary Data

The primary data was collected using structured interview schedule among 150 student and 30 teacher's responds from government and government aided school of Nagamangala, Maddur, Malavally, Mandya (North and South), Panduvapura and Srirangapatna.

Secondary data regarding information about MDMs was taken from the official website and office of the Department of Women \& Child Development.

### 5.2 Nutrition Diet in Mid-Day Meal

The MDMs guidelines envisage providing cooked midday meal with 450 calories and 12 g of protein to every child at primary level and 700 calories and 20 g of protein at upper primary level.

This energy and protein requirement for a primary child comes from cooking 100 g of rice/flour, 20 g pulses and 50 g vegetables and 5 g oil, and for an upper primary child it comes from 150 g of rice/flour, 30 g of pulses and 75 g of vegetables and 7.5 g of oil. In alternative days Milk, Egg, ragi and fruits has been provided to the students.

## 6. Findings and Discussions

### 6.1 Social Profile of Student Beneficiaries of MDMs

This section studies the profile of the student beneficiaries of MDMs. Table 1 represents the social profile of beneficiaries of MDMs such as age, gender, current schooling, religion, community, category (BPL), number of members in the family, number of income generating members at home, number of sibling, number of times of food intake in a day, attend school regularly, reasons for not attending school regularly.

Table 1. Profile of student beneficiaries of MDMs

| $\begin{aligned} & \text { SL } \\ & \text { NO } \end{aligned}$ | PARTICULARS | FREQUENCY $(\mathrm{n}=150)$ | PERCENTAGE <br> (\%) |
| :---: | :---: | :---: | :---: |
| 1 | Age of Respondents <br> i) 6-9 <br> ii) $10-12$ <br> iii) 12-15 | $\begin{aligned} & 53 \\ & 50 \\ & 47 \end{aligned}$ | $\begin{aligned} & 35.4 \\ & 33.3 \\ & 31.3 \end{aligned}$ |
| 2 | Gender <br> i)Male <br> ii)Female | $\begin{aligned} & 74 \\ & 76 \end{aligned}$ | $\begin{aligned} & 49.3 \\ & 50.7 \end{aligned}$ |
| 3 | Current schooling <br> i)Primary school <br> ii)Middle school <br> iii)High school | $\begin{aligned} & 69 \\ & 45 \\ & 36 \end{aligned}$ | $\begin{aligned} & 46.0 \\ & 30.0 \\ & 24.0 \end{aligned}$ |
| 4 | Religion of <br> Respondents <br> i) Hindu <br> ii)Christian <br> iii)Muslim | $\begin{aligned} & 135 \\ & 0 \\ & 15 \end{aligned}$ | $\begin{aligned} & 90.0 \\ & 0 \\ & 10.0 \end{aligned}$ |
| 5 | Community <br> i)SC <br> ii) ST <br> iii)OBC <br> iv)Others | $\begin{aligned} & 21 \\ & 13 \\ & 112 \\ & 4 \end{aligned}$ | $\begin{aligned} & 14.0 \\ & 8.7 \\ & 74.7 \\ & 2.6 \end{aligned}$ |
| 6 | Category of the respondents (belong to BPL) <br> i) Yes <br> ii)No | $\begin{aligned} & 147 \\ & 3 \end{aligned}$ | $\begin{aligned} & 98.0 \\ & 2.0 \end{aligned}$ |
| 7 | Number of members in the family <br> i) $2-3$ <br> ii) 4-5 <br> iii)More than 5 | $\begin{aligned} & 29 \\ & 71 \\ & 50 \end{aligned}$ | $\begin{aligned} & 19.3 \\ & 47.4 \\ & 33.3 \end{aligned}$ |
| 8 | Number of incomes generating members in the family <br> i)Less than 2 <br> ii) 2-3 <br> iii)More than 3 | $\begin{aligned} & 42 \\ & 91 \\ & 17 \end{aligned}$ | $\begin{aligned} & 28.0 \\ & 60.7 \\ & 11.3 \end{aligned}$ |
| 9 | Number of siblings <br> i)Less than 2 <br> ii) 2-3 <br> iii)More than 3 | $\begin{aligned} & 120 \\ & 23 \\ & 7 \end{aligned}$ | $\begin{aligned} & 80.0 \\ & 15.3 \\ & 4.7 \end{aligned}$ |
| 10 | Number of times of food take in a day <br> i)Less than 2 <br> ii) 2-3 <br> iii)More than 3 | $\begin{aligned} & 0 \\ & 148 \\ & 2 \end{aligned}$ | $\begin{aligned} & 0 \\ & 98.7 \\ & 1.3 \end{aligned}$ |


| 11 | Attended school |  |  |
| :--- | :--- | :--- | :--- |
|  | 130 | 86.7 |  |
|  | i)Yes |  |  |
| ii)No | 20 | 13.3 |  |
| 12 | Reasons for not |  |  |
|  | attending school |  |  |
|  | 10 | 6.7 |  |
|  | 10 | 0 |  |
|  | 0 | 6.7 |  |
|  | provided regularly | 10 | 86.6 |
| iii)Have to attend | 130 |  |  |
|  | work |  |  |
| iv)Not applicable |  |  |  |

Source: Compiled from Primary data

1. Age: It is observed that majority of the respondents belong to the age group of 6-9 years ( 35.3 percent) and second major being $10-12$ years ( 33.33 percent). With this it can be inferred that respondents of the age group 6-9 years and 10-12 years ( 88.6 percent combined) are majorly studying in government and government aided schools whereas students of other age group of 12-15 years leave the school to attend work or for other domestic reason.
2. Gender: Out of 150 students responded it was observed that majority of the responded are female (50.7 percent). With this it can be discussed that female students are more enrolled in government and government aided schools has compared to male because male students are much admitted to Private English schools. In this scheme, the priority has been given to girl's education (Beti Bachoo Beti Padavo). This indicates that the programme is successful in reaching the right people to increase their enrolment.
3. Current Schooling: It was discovered that majority of the respondents was studying in primary school (46.0 percent) and second highest being middle school (30.0 percent) with this it can be illustrated that students studying in primary school and middle school (76.0 percent combined) are majorly studying in government and government aided schools whereas High school students leave the school to attend work or for other domestic reason.
4. Religion: It is observed that majority of the respondents were Hindus ( 90 percent). This is because Mandya district has many old Hindu pilgrimage centres and majority of the respondents who were interviewed are residing there from a very long time. The second majority of
the respondents were Muslim (10 percent), whereas no Christian was found in the area of sample.
5. Community: In this scheme, the priority has been given to educate the children of marginalised group who belong to the Scheduled Caste/Scheduled Tribe (SC/ST)/ OBC communities in the society. From the table above it is inferred that the majority of the students' respondents belong to OBC community ( 74.7 percent). Second major being SC and ST with 14 percent and 8.7 percent respectively. Whereas 2.6 percent of the respondents belong to general category. This indicates that the programme has reached the right people and is helping them to overcome the problems of poverty.
6. Category: Out of 150 students' responses, 98 percent belong to Below Poverty Line category. Whereas 2 percent don't belong to Below Poverty Line category. The focus of MDMs is on the children of such people who are below poverty line to alleviate their standard of living.
7. Number of members in the family: From the data above, it is discovered that majority of the students' respondents have $4-5$ members in their family ( 47.4 percent) and second majority having more than 5 members in the family ( 33.3 percent). With this it can be discussed that family with more number of members enrol their children to government and government aided schools due to their poverty condition at home. Whereas family with less number of members at home are able to send their children to private schools.
8. Number of income generating members in the family: It is observed that majority of the respondents have 2-3 number of income generating members in the family ( 60.7 percent) and second majority of respondents have less than 2 number of income generating members in the family ( 28.0 percent). With this it can be inferred that respondents from less than 2 and 2-3 number of incomes generating members at home ( 88.7 percent combined) are majorly studying in government and government aided schools due to less aggregate family income to enrol their children private school.
9. Number of siblings: out of 150 students respondent's majority of the respondents have less than 2 siblings ( 80.0 percent) and second majority having 2-3 siblings (15.3 percent). With this it can be seen that today's parents
support nuclear family as a way to eradicate poverty and to alleviate their standard of living.
10. Number of times of food intake in a day: From the above table it was observed that majority of the student respondents' intake food for 2-3 times a day (98.7 percent). With this it can be inferred that the scheme by providing mid-day meal to students has been able to increase the number of times of food intake of the student beneficiaries.
11. Attended school regularly: It is discovered that majority of the student respondents attended school regularly ( 86.7 percent) whereas 13.3 percent do not attend school regularly. With this it can be discussed that student are developing interest in attending school for learning, socializing and for MDM provided at school. Moreover, parents are also encouraging their children to attended school.
12. Reasons for not attending school regularly: Out of 150 students respondent's majority of the respondents attend school regularly hence the reason for not attending school regularly is not applicable to them. On the other hand, from the above data it was observed that 20 respondents do not attend school for the reason that they don't feel well and have to attend work with both being 6.7 percent.

### 6.2 Social Development Factors of Beneficiaries

This part of the study identifies and studies the social development factors of the student beneficiaries of MDMs. Maintaining hygiene/cleanliness while serving MDM as a social development factor to attend school regularly.

From Table 2, it can be inferred that out of 150 respondents, 130 of the student respondents are regular to school due to hygiene/cleanliness maintained while serving MDM as such students are not much prone to diseases. Whereas 20 respondents do not attend school regularly though proper hygiene/cleanliness are maintained while serving MDM due to the fact that such students have to attend work or for other domestic reason. This shows that maintaining of hygiene/cleanliness contribute towards social development of the student respondents by reducing absents.

Table 2. Cross-tab of maintaining hygiene/cleanliness while serving MDM and attend school regularly

|  | Regular to school |  |  |
| :--- | :--- | :--- | :--- |
|  | YES | NO | Total |
| Maintain hygiene/cleanliness |  |  |  |
| i) YES | 130 | 20 | 150 |
| ii) NO | 0 | 0 | 0 |
| TOTAL | 130 | 20 | 150 |

Source: Compiled from Primary data

### 6.3 The Degree of Association between Attending Health Check-Up at School and Attending School Regularly

This part of the study verifies the degree of association between attending health check-up at school and attending school regularly. The variables used in the study are "Attended health check-up organized by health department" and "Attended school regularly". The following hypothesis has been formulated to test the degree of association among the variables.
$\mathbf{H}_{0}$ : There is no significant association attending health check-up at school and attending school regularly
$\mathbf{H}_{\mathbf{1}}$ : There is significant association between health check-up at school and attending school regularly

Table 3. Chi-square test statistics

|  | Value | df | Asymptotic Significance <br> (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson <br> Chi-Square | 80.667 | 1 | .000 |

Source: Compiled from Primary data
The Table 3 examine the association between the variables "Attended health check-up organized by health department" and "Attended school regularly" by applying $\chi^{2}$ test. The calculated value of $\chi^{2}$ at $5 \%$ significant level at 1 df is 80.667 and significance value is $0.000(\mathrm{p}<0.05)$. Hence the null hypothesis was rejected. By this statistical analysis, it can be inferred that there is association between attending health check-up at school and attending school regularly.

## 7. Conclusion

The MDMs is a flagship programme of Union Government of India for achievement of Universalization of Elementary

Education (UEE) which supplies free lunches on working days for students in primary, middle and high school of government, government aided, education centres supported by Sarva Shiksha Abhiyan and National Child Labour Project schools run by the ministry of labour. The inferences of the study revealed that MDM has succeeded in creating social development among Marginalised Children. In the study it was observed that majority of the students' respondents belong to OBC community (74.7 percent) and Second major being SC and ST with 14 percent and 8.7 percent respectively this indicates that the programme has reached the right people and is helping them to overcome the problems of poverty, 98 percent belong to Below Poverty Line category the focus of MDMs is on the Marginalised children who are below poverty line to alleviate their standard of living. It was also discovered that all the student respondents observe hygiene/cleanliness while having MDM. With this it can be inferred that school management maintains hygiene and cleanliness while preparing and serving MDM to the students which contribute towards the social development of students. The Cross-tab between Maintaining hygiene/ cleanliness while serving MDM and attend school regularly shows that maintaining of hygiene/cleanliness contribute towards social development of the student respondents by reducing absents and Finally the result of Chi-square rejected null hypothesis with this it was inferred that there is association between attending health check-up at school and attending school regularly. The study recommends that government and government aided school need to appoint an independent organizer other than the teacher because in those school where teachers have to self-monitor and supervise MDM where independent organizer is not employed MDM, such teacher feel MDM as the distractive force to their teaching activity.

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