

# Evaluation of effectiveness of Mid Day Meal Scheme on Enrolment and Drop out Rate of Children in Rural Government Schools

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Paper No. 766

Received: 03-09-2018

Accepted: 19-01-2019

## ABSTRACT

National Programme of Nutritional Support to Primary Education (NP-NSPE) commonly known as Mid Day Meal Scheme was launched by the Ministry of Human Resource Development (Department of Education) with effect from 15th August, 1995. The programme is designed to give a boost to the universalization of primary education. It is helping poor children belonging to disadvantaged section to attend school more regularly and help them to concentrate on classroom activities. The present research aimed at studying the impact of Mid Day Meal Scheme (commonly known as Aksharadasoha) on enrolment and dropout rate of children in five rural government schools in Hassan district of Karnataka state. The field study was based on the observations of 208 children, 104 girls and 104 boys studying primary/ upper primary and high schools in which Mid-Day Meals Scheme was functional. The data was collected from government school records. In all 208 parents of the beneficiary children were selected and interviewed to collect information about their socioeconomic status. The results showed that majority of the parents had their primary and upper primary level of education, they were engaged in agriculture and allied activities and their annual income was less than Rs. 50,000. The study also revealed that there was continuous decline in the enrolment of children (both male and female) per session from 2011-12 to 2014-15 in government schools of Hassan district. The drop-out rate has been minimized to a large extent and from the session 2011-12 to the session 2014-15.

## Highlights

- The government has left no stone unturned to achieve the aim of universalisation of elementary education by launching various schemes to enrol and minimize the dropout rate.

**Keywords:** Mid day meal scheme, universalization, dropout rate, enrolment, education

Education is considered as a means in the long range perspective of bringing about social equality. Providing education for all is thus a challenge for the developing countries. Twelfth Five Year Plan places an unprecedented focus on the expansion of education, on significantly improving the quality of education and on ensuring that educational opportunities are available to all segments of the society. To meet these challenges, National Programme of Nutritional Support to Primary Education (NP-NSPE) commonly known as Mid

Day Meal Scheme was launched by the Ministry of Human Resource Development (Department of Education) with effect from 15<sup>th</sup> August, 1995. The programme is designed to give a boost to the universalization of primary education. It is helping poor children belonging to disadvantaged section to attend school more regularly and help them to concentrate on classroom activities. The Mid Day Meal Scheme also called as *Akshara Dasoha* was initiated in Karnataka during 2002 for seven educationally backward districts and was extended



to other districts of the state from July 2004. The *Akshara Dasoha* Programme is covering all the 29 districts and 177 revenue blocks of the state. Children studying in classes 1 to 10th standard in all government and government aided primary schools are covered under the scheme. The following table gives the details of the number of schools covered in this programme.

**Monitoring and supervision of cooked meal programme**

Government of Karnataka has formed district level implementing committees for the supervision and effective implementation of the Cooked Meal Programme under the chairmanship of the district in-charge Minister, elected representatives and concerned officials of the various departments. Government of Karnataka has also given directions to Chief Executive Officers of the Zilla Panchayath, Education Officers, of MDMS, Deputy Directors of Public Instruction (DDPI) and Block Education Officers (BEO) to mobilize mothers towards supervision of preparation and distribution of MDMS.

**Table 1:** Quantity of the Food Grains supplied under Mid Day Meal Scheme

Quantity gms	Primary I - V	Upper Primary VI-VII	High Schools VIII-X
Rice	100	150	150
Pulses	20	20	25
Vegetables	50	50	70
Salt	02	02	04
Oil	03	03	06

*Apart from the cooked meal supplementary nutrition is provided in the form of tablets i.e. a) Vitamin 'A' 2 tablets per year (b) Iron/Folic acid tablets (20mg), 3 per week for 36 weeks and (c) Deworming tablets (400 mg) 2 per year.*

Source: AWP& B 2008-09

**Norms of nutrition**

The hot cooked meal contains about 490 calories for primary school children and 12 gms of protein. For the high school children it is 728 calories and 17.30 gms of protein. The calorific value is ensured on the basis of using good quality of Rice and other good quality food ingredients as per the norms of National Institute of Nutrition. Nutritional experts are also involved in planning and evaluation

of menus and quality of food served under the programme.

**Objectives**

The major question under consideration for studying the impact was that whether Mid Day Meal Scheme has any positive impact on the education in government schools in terms of increasing enrolment and decreasing drop-out rates in rural areas of Hassan district.

**MATERIALS AND METHODS**

**Selection of schools and children**

The investigator used random simple sampling technique for selection of schools. Five rural government schools having Mid Day Meal provisions Viz., Ankapur, Nagalapur, Rangapur, Kinnerhalli and Ganjalagudu from Hassan district were taken into consideration for sampling purpose. Out of these schools, 208 students, 104 girls and 104 boys studying in 1<sup>st</sup> to 10<sup>th</sup> standard were selected randomly for the present study. In all 208 parents have been selected from the five villages whose children are beneficiaries of Mid Day Meal Scheme. Totally 50 teachers were selected randomly from different government schools in the rural areas of Hassan district.

**Sources of data**

The data was collected from government documents, school records, reports of various Commissions and Committees, guideline of NP-NSPE-2006. Annual Work Plan and Budget (AWP & B) for Mid Day Meal Programme. Further, the data was obtained from the beneficiaries of the scheme viz. Children and parents of the beneficiaries of government schools of Hassan for the present study. Interview schedules were used to collect the information relating to socio-economic profile of students, parent's education; occupation and their income level were assessed. The data with regard to enrolment and dropout was collected from government school records.

**RESULTS AND DISCUSSION**

**Educational level of the parents**

The educational background of the parents is an important factor for enabling children to continue

**Table 2:** Educational level of Parents of beneficiary Children

Village	Ankapur (n=54)		Nagalapur (n=40)		Kinnerahalli (n=40)		Ganjalgudu (n=44)		Rangapur (n=30)		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Illiterate	00	00.0	03	7.5	04	13.3	00	00.0	00	00.0	07	3.37
Primary	14	25.9	15	37.5	14	46.7	12	30.0	08	26.7	73	35.10
Upper primary	19	35.2	11	27.5	08	26.7	18	40.9	17	56.7	73	35.10
High school & above	20	37.1	09	22.5	04	13.3	11	25.0	04	13.3	48	23.10
Graduation & above	01	1.9	02	5.0	0.0	0.0	03	7.5	01	3.3	07	3.37

**Table 3:** Occupation of parents of beneficiary children from selected villages

Village	Ankapur (n=54)		Nagalapur (n=40)		Kinnerahalli (n=40)		Ganjalgudu (n=44)		Rangapur (n=30)		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Agriculture & allied activity	30	55.5	25	62.5	28	70.0	25	56.8	18	60.0	126	60.58
Self-employed (non agriculture)	12	22.2	08	20.0	04	13.3	06	13.6	05	16.6	35	16.83
Agricultural/other labour	11	20.3	07	17.5	08	26.7	12	27.3	07	23.3	45	21.64
Govt. Employment	01	1.85	00	00.0	00	00.0	01	02.3	00	00.0	02	0.96

education. When total sample was considered educational qualification of parents interacted during study showed that maximum number of parents had primary and upper primary (35.1 and 35.1%) level of education. Least were found in the graduation and above and illiterate (3.37 and 3.37 %) level respectively.

### Occupation of parents of the beneficiary children

The investigator interviewed the head of the family and their occupation was recorded in the schedules.

It is evident from the study (Table 3) that highest of (60.58) per cent parents were involved in agriculture and allied activities. Least number of government employees found only in Ankapur and Ganjalguda villages and no government employees were found from rest of the villages. It is clear from the data that main occupation of the parents of beneficiary students was agriculture and allied activities and only few were government employees. As a consequence of low income of the parents, children are expected to work to supplement the household incomes.

### Annual Income of the households for the beneficiary children

The annual income of the parent of the beneficiaries was recorded and presented in the table 4.

The occupations of parents have been grouped into four categories for statistical convenience. The results of the present study revealed that maximum of 49.3 per cent of the households annual income was below ₹ 50,000 followed by 50,000 to one lakh rupees. Lowest percent of households (11.10%) comes under high income group of rupees more than one lakh.

These parents send their children to the government schools situated nearby their house because of shorter distance of the school from their house and incentives like, fewer burden of fees, uniform and free meals for children in government school. It was difficult for the poor parents to bear the expenses of private school therefore they attached their selection of school with direct benefits they got from the government school.



## Impact of Mid Day Meal Scheme on enrolment of the children

The enrolment of children in a class or a school depicts the number of children admitted in that class or school for that particular academic year. To evaluate the effectiveness of Mid Day Meal Scheme in the achievement of this objective, gender-wise enrolment of students in the selected government schools from session 2011–12 to 2015–16 was studied.

In the last five successive sessions, enrolment of students (Table 4) in session 2011-12 was maximum (427). After this there was continuous decline in the enrolment of students in each proceeding sessions. The enrolment of students per school was minimum (360) in session 2015-16 in comparison to successive sessions. There was decline in enrolment of students (both male and female) per session from 2011– 12 to 2015–16. The present study also revealed that the enrolment of female students in comparison to male students has improved in all the sessions. Therefore, it can be interpreted that there was continuous decline in enrolment of students in government schools of the district. However, the decline in enrolment may be attributed due to other factors such as mushrooming growth of private English medium schools in the locality and preference of parents towards these schools, lack of facilities in government schools etc. Similar results were observed in the study conducted pointed out that the factors like illiteracy and poverty of parent’s, inadequate teaching staff, single teacher schools and lack of accommodation were responsible for low enrolment of students at elementary stage in the tribal areas of Himachal Pradesh. Kumar (2009) in his study “Effectiveness of National Programme of Nutritional Support to Primary Education (MDM Scheme) in District Hamirpur of Himachal Pradesh: An Evaluative Study” found that there was decline in average enrolment of students in government primary schools of Himachal Pradesh. Mahesh Kumar (2017) pointed out that girls do not get equal opportunity for education as compared to boys because of gender disparity. However, Mid Day Meal offers these girls an opportunity to get enrolled and attend school regularly. These girls try to make most of this opportunity by studying regularly and sincerely. According to Shiva Kumar (2003), in poor countries like India school feeding

programmes serve as an incentive for parents to enrol their children. They ensure higher attendance and reduce dropout rates. These programmes increase the possibility of retaining children in school for a longer period during day and thereby increasing the learning opportunities for them.

Blue (2005), in his study on “An assessment of Programme Implementation and Impact in Udaipur District”, found that It was difficult to draw a conclusion on the effect of programme on school enrolment as the mid-day meal programme was launched concurrently with the Shiksha Aapke Dwar Programme which required teachers to indentify non enrolled students in villages and persuade them to attend school. National Institute of Nutrition, Hyderabad (1991) the impact of Mid Day Meal Programme on enrolment is difficult to pinpoint. However, comparisons of retention rates and drop-out rates between MDMS and non MDMS schools showed a favourable status in MDMS schools. The major problem in front of government schools is of low enrolment and continuous moving of the students towards private schools.

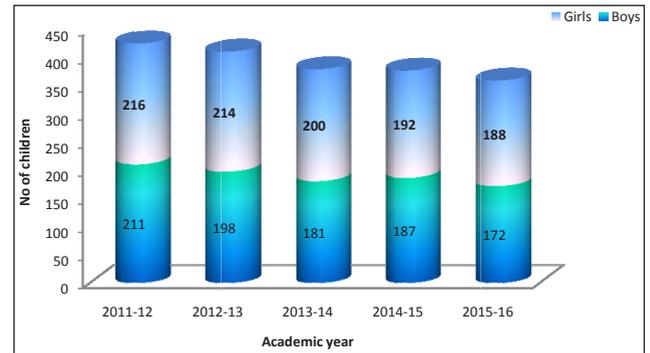


Fig. 1: Enrolment of children in selected Government Schools of Hassan district

## Impact of Mid Day Meal Scheme on drop-out rate of the children

Drop-outs are those children who are enrolled in the school but leave the school after some time without completing their education. In this case there are two categories of children.

Those who are forced to leave the school due to socio-economic constraints of the family and may be called “pull-outs”.

Those who leave the school because they do not find school environment joyful and satisfying, and may be called “push-outs”.

**Table 4:** Annual Income of the households for the beneficiary children

Village	Ankapur (n=54)		Nagalapur (n=40)		Kinnerahalli (n=40)		Ganjalgudu (n=44)		Rangapur (n=30)		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Annual income												
≤50,000	25	46.3	10	25.0	20	50.0	28	63.6	19	63.3	102	<b>49.03</b>
50,000-1lakh	22	40.7	25	62.5	16	40.0	14	31.8	06	20.0	83	<b>39.90</b>
≥ 1lakh	07	12.9	05	12.5	04	10.0	02	4.55	05	16.6	23	<b>11.10</b>

Both types of categories of students are drop-outs and drop-outs are the main problem in the way of achieving the goal of universalization of elementary education. The school lunch programme was primarily introduced to prevent drop-out from the schools. Decrease in drop-out rate also implies that there has been an increase in the average retention rate of students.

In order to study the drop-out rate in these selected government schools in Hassan district, the data related to gender-wise number of drop-outs from 2011-12 to 2015-16 was collected from the school records and was analyzed. The study revealed that (Table 5) the drop-out rate decreased due to provision of school lunch. In the year 2012-13 the dropout rate was high (0.73%) followed by 0.52 per cent in the year 2013-14.

**Table 5:** Number of dropouts from the selected Govt. schools

Year	Boys (No)	Girls (No)	Total (No)
2011-12	0	01	1
2012-13	03	0	3
2013-14	02	0	2
2014-15	0	01	1
2015-16	0	0	0

*Source:* From School records.

No drop out cases was recorded in these selected schools during 2015-16. The study revealed that despite the mushrooming growth of English medium schools where admission of the child has become a status symbol, the Mid Day Meal Scheme has been successful in retaining the children in government schools. Similar results were obtained in the study conducted by National Council of Educational Research and Training (2000). It was reported that the noon meal scheme of Tamil Nadu

and supply of food grains in Uttar Pradesh have helped to improve the enrolment and retention of girls in schools. Similar results were reported by Nielsen (2007). He concluded that Mid Day Meal Programme had reduced the drop-out rates and improved the retention rates in all higher classes. This is in agreement with Naik (2005) who reported that the dropout rate has decreased to 56.69 per cent after initiation of Akshara Dasoha programme in schools of Karnataka. Laxmaiah et al. (1999) who evaluated the mid-day meal in Karnataka reported that the year wise dropout rate was significantly lower in mid-day meal schools. The dropout rate varied from 14-18 per cent as against 27.26 per cent in non mid- day meal schools.

## CONCLUSION

Mid Day Meal Scheme seeks to provide for each school child roughly a third of the daily nutrient requirement in the form of a hot fresh cooked meal. It is sometimes argued that in the case of children of poor households, the school meal may become a substitute rather than a supplement for the home meal. It is important to note that it is not merely the long-term effects of the school meal on the nutritional status but its Short-Term Effects on better attention, memory and learning that is important. A hungry child is a poor learner lacking in concentration. A mid day meal is an important instrument for combating classroom hunger and promoting better learning. Mid Day Meal Scheme had proved to be an effective means to check high dropout rates of children from economically weaker sections, while also addressing their nutritional needs.

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