# Opinion of rural school children about mid-day meal programme 

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#### Abstract

Mid-Day Meal Programme was launched as a centrally sponsored scheme on 15th August 1995. Its objective was to boost universalization of primary education and to improve the nutritional status of children by the food being given to them at the school. Opinion of the rural school children, parents, teachers and community leaders are very much important to improve the policies and guidelines related to the programme. Therefore, an effort was made to study the opinion of rural school children about mid day meal programme. The study was conducted in the purposively selected two villages of Garag and Yettingudda of Dharwad district of northern Karnataka and two villages of Bhojla and Simarddha of Jhansi district of Uttar Pradesh. From each village 30 rural school children, 30 parents, 20 community leaders and 10 teachers were randomly selected for the study. Purposively 120 rural school children of 5th, 6th, 7th standard belonged to 10-13 years of age group were selected. Structured interview schedule was used for collection of information. The data was analysed using suitable statistical parameters like frequencies, percentages, opinion index and class intervals. The present study showed that most of $(92.50 \%)$ the rural school children had most favourable opinion about mid day meal programme and also most of ( $89.20 \%$ ) the parents had most favourable opinion about mid day meal programme. Large majority of ( $78.30 \%$ ) the teachers had most favourable opinion about mid day meal programme. Most of $(92.50 \%$ ) the community leaders had most favourable opinion about mid day meal programme. Thus it can be concluded that the mid day meal programme helps to change the mind sets of children which leads to change the mind set of parents and hence of the community about education and nutritional aspects of the children and this programme becomes one of the extrinsic motivation factors for increasing their enthusiasm for the study. Hence, this programme should be continued.


Key words: Community leaders, Education, Motivation, Nutritional, Opinion

## Introduction

Mid-Day Meal Programme was launched as a centrally sponsored scheme on 15th August 1995. Its objective was to boost universalization of primary education and to improve the nutritional status of children by the food being given to them at the school. The Mid-Day Meal Programme was introduced primarily to protect the nutritional as well as the educational rights of the children. This is due to the fact that children are not able to concentrate in their studies with empty stomach and there is a need to focus upon the Mid-Day Meal Programme, to overcome child's short term hunger. Thus, initiating this kind of meal programme, Government of India aimed at helping the children especially belong to the poor socio-economic background to attend school and to have at least mid-day meal through which their education as well as food related issues could be tackled. Rani \& Sharma (2008) conducted a study on empirical study of the mid-day meal program in Khurda district in Odisha, it was revealed that the mid-day meal program was initiated as a means of achieving universal primary education and satisfactory quality for all the school children bellow the age before 14 by increasing enrollment improving attendance and retention and simultaneously improving nutritional status.

The Mid-Day Meal Programme covered all students in primary schools run or funded by the Government throughout the country. Initially the Mid-Day Meal Programme provided 3 kilograms of food grain per student per month. On 28 November 2001, the Supreme Court directed state governments to introduce cooked mid-day meals in all government and government assisted primary schools within six months. This landmark order was one
of the first achievements of the right to food campaign. The order was followed by organized public pressure for the introduction of cooked mid-day meals in primary schools, e.g. in the form of a countrywide "day of action on mid-day meals". In response to this pressure, and the Court orders, all state governments have initiated mid-day meal programmes. Today, with more than 100 million children covered, India's mid-day meal programme is by far the largest school feeding and nutrition programme in the world. According to common usage "opinion is a judgment or belief based on the grounds short of proof and provisional conviction found on probable evidence (Bhatia, 1965). Opinion of the rural school children, parents, teachers and community leaders are very much important to improve the policies and guidelines related to the programme. Therefore, an effort was made to study the opinion of rural school children about mid day meal programme.

## Material and methods

The present study was conducted during the year 2015-16. The comparative study was conducted in the purposively selected two villages of Garag and Yettingudda of Dharwad district of northern Karnataka and two villages of Bhojla and Simarddha of Jhansi district of Uttar Pradesh. From each village 30 rural school children, 30 parents, 20 community leaders (School Management Committee Members) and 10 teachers were randomly selected for the study. Purposive sampling method was used to select 120 rural school children of $5^{\text {th }}, 6^{\text {th }}, 7^{\text {th }}$ standard belonged to $10-13$ years of age group to study their opinion score and opinion level about mid day meal programme. The
dependent variable taken for the study was opinion about mid day meal programme. Structured interview schedule was used for collection of information. The data were coded, categorized, tabulated, analysed and interpreted using suitable statistical parameters like frequencies, percentages and class intervals.

## Results and discussion

Table 1 indicated the opinion of school children about mid day meal programme. The scale used to measure opinion is three point scale viz., Most favourable, Favourable and Not favourable. This carried the scores of 3,2 and 1 respectively.

In Dharwad region, 98.30 per cent of rural school children preferred continuation of the mid day meal programme followed by 96.70 per cent rural school children reported that they were happy with quantity and quality of the mid day meal and 91.70 per cent reported that the menu of the mid day meal should be changed periodically to include seasonal foods but 36.70 per cent of rural school children reported that they would like to have mid day meal on holiday and 26.70 per cent of school children were interested in meals as compared to classroom learning. Mahendran and Indrakant (2014) showed similar recommendation in their study that the scheme should not have top-down
approach. The menu in the Mid-Day Meals should be changed only when there is a demand from children.

Whereas, in Jhansi region, cent per cent rural school children reported that they can concentrate on classroom learning after meals and they also preferred continuation of the mid day meal programme followed by 98.30 per cent rural school children reported that they were enjoying to have mid day meal in their school, the meal serving time was convenient and appropriate to them and the quantity of mid day meal served to them was sufficient and 95.00 per cent rural school children reported that they were happy with quantity and quality of the mid day meal. But, 18.30 per cent rural school children reported that they would like to have mid day meal on holiday and only 8.30 per cent of rural school children were interested in meals as compared to classroom learning. In both the regions 8.30 per cent of rural school children reported that they were able to concentrate in afternoon classes as compared to morning classes.

As most of the rural school children were happy with quantity and quality of mid day meal provided to them. This may be the reason for higher number of Dharwad children ( $98.30 \%$ ) and cent percent children of Jhansi region preferred continuation of mid

| Table 1. Opinion of school children about mid day meal programme |  |  |  |  |  |  | ( $\mathrm{n}=120$ ) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statement | Dharwad ( $\mathrm{n}=60$ ) |  |  | J | hansi ( $\mathrm{n}=60$ ) |  | Opinion |
|  | Most favourable | Favourable | Not favourable | Most favourable | Favourable | Not favourable | index |
| 1. The meal served to students is good in terms of quality of food grains, vegetables etc. | $\begin{gathered} \hline 37 \\ (61.70 \%) \end{gathered}$ | $\begin{gathered} 23 \\ (38.30 \%) \end{gathered}$ | - | $\begin{gathered} 51 \\ (85.00 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (15.00 \%) \end{gathered}$ | - | 91.11 |
| 2. Students enjoying to have mid day meal in their school | $\begin{gathered} 48 \\ (80.00 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (20.00 \%) \end{gathered}$ | - | $\begin{gathered} 59 \\ (98.30 \%) \end{gathered}$ | $\begin{gathered} 01 \\ (1.70 \%) \end{gathered}$ | - | 96.38 |
| 3. The menu of the mid day meal has to be changed periodically to include seasonal foods | $\begin{gathered} 55 \\ (91.70 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (6.70 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | $\begin{gathered} 32 \\ (53.30 \%) \end{gathered}$ | $\begin{gathered} 26 \\ (43.30 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (3.30 \%) \end{gathered}$ | 90.00 |
| 4. The meal serving time is convenient and appropriate | $\begin{gathered} 47 \\ (78.30 \%) \end{gathered}$ | $\begin{gathered} 13 \\ (21.70 \%) \end{gathered}$ | - | $\begin{gathered} 59 \\ (98.30 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | - | 96.11 |
| 5. The quantity of meal served is sufficient | $\begin{gathered} 45 \\ (75.00 \%) \end{gathered}$ | $\begin{gathered} 15 \\ (25.00 \%) \end{gathered}$ | - | $\begin{gathered} 59 \\ (98.30 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | - | 95.56 |
| 6. Children can concentrate on classroom learning after meals | $\begin{gathered} 42 \\ (70.00 \%) \end{gathered}$ | $\begin{gathered} 18 \\ (30.00 \%) \end{gathered}$ | - | $\begin{gathered} 60 \\ (100.00 \%) \end{gathered}$ |  | - | 95.00 |
| 7. Hygiene is maintained while serving the meal | $\begin{gathered} 48 \\ (80.00 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (20.00 \%) \end{gathered}$ | - | $\begin{gathered} 41 \\ (68.30 \%) \end{gathered}$ | $\begin{gathered} 19 \\ (31.70 \%) \end{gathered}$ | - | 91.39 |
| 8. Proper drinking water is supplied | $\begin{gathered} 44 \\ (73.30 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (26.70 \%) \end{gathered}$ | - | $\begin{gathered} 30 \\ (50.00 \%) \end{gathered}$ | - | $\begin{gathered} 30 \\ (50.00 \%) \end{gathered}$ | 78.89 |
| 9. Feeling of satiety aroused in children after having meal | $\begin{gathered} 33 \\ (55.00 \%) \end{gathered}$ | $\begin{gathered} 26 \\ (43.30 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 56 \\ (93.30 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (6.70 \%) \end{gathered}$ | - | 91.11 |
| 10. Children can concentrates more during morning classes compared to afternoon classes | $\begin{gathered} 38 \\ (63.30 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (28.30 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (8.30 \%) \end{gathered}$ | $\begin{gathered} 44 \\ (73.30 \%) \end{gathered}$ | $\begin{gathered} 11 \\ (18.30 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (8.30 \%) \end{gathered}$ | 86.67 |
| 11. Children are interested in meals compared to classroom learning | $\begin{gathered} 16 \\ (26.70 \%) \end{gathered}$ | $\begin{gathered} 19 \\ (31.70 \%) \end{gathered}$ | $\begin{gathered} 25 \\ (41.70 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (8.30 \%) \end{gathered}$ | $\begin{gathered} 46 \\ (76.7 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (15.00 \%) \end{gathered}$ | 63.06 |
| 12. There is need to continue the mid day meal programme | $\begin{gathered} 59 \\ (98.30 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | - | $\begin{gathered} 60 \\ (100.00 \%) \end{gathered}$ | - | - | 99.72 |
| 13. Children are happy with quantity and quality of meal | $\begin{gathered} 58 \\ (96.70 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (3.30 \%) \end{gathered}$ | - | $\begin{gathered} 57 \\ (95.00 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (5.00 \%) \end{gathered}$ | ${ }^{-}$ | 98.61 |
| 14. Children like to have mid day meal on holiday | $\begin{gathered} 22 \\ (36.70 \%) \end{gathered}$ | $\begin{gathered} 14 \\ (23.30 \%) \end{gathered}$ | $\begin{gathered} 24 \\ (40.00 \%) \end{gathered}$ | $\begin{gathered} 11 \\ (18.3 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (15.00 \%) \end{gathered}$ | $\begin{gathered} 40 \\ (66.70 \%) \end{gathered}$ | 58.06 |

day meal programme. Similarly, Rana et al. (2005) reported that 88.00 per cent of children suggested for continuation of programme. Dreze and Goyal (2003) pointed out that the main purpose of a recent survey initiated by the Centre for Equity Studies was to check the quality of school meal programme in Karnataka, Chattisgarh and Rajasthan. It points out that the quality of school meal programme is significantly better in Karnataka than in Chattisgarh or Rajasthan. While 98.30 per cent rural school children in Jhansi region reported that they were enjoying mid day meal, the meal serving time was convenient and appropriate and the quantity of mid day meal served to them was sufficient. The probable reasons might be that school children feel good to eat and share with their other classmates, the timing of serving meal was appropriate because of the reason that children used to eat their food usually during lunch period. As the quantity per child is decided but if children want to eat more than one time they can take easily by the helpers. Whereas, 91.70 per cent school children in Dharwad region reported that menu of the mid day meal should be periodically changed by including seasonal foods. The reason could be the monotonous nature of menu due to which children sometimes felt bored to eat the meal. Rani and Sharma (2008) also showed that school children had suggested that the menu of the food should be changed from time to time to break the monotony.

Table 1a and Fig. 1 indicated the categorization of rural school children according to their opinion level about mid day meal programme. It can be seen that majority of rural school children i.e., 92.50 per cent had most favourable opinion about the mid day meal programme followed by only 7.50 per cent rural school children had favourable opinion about mid day meal programme and none of them had less favourable opinion. The total opinion index was 87.98 per cent which is highly noticeable. This indicates that rural school children have good opinion about mid day meal programme which was meant for school children.

Table 2 indicated the opinion of parents about mid day meal programme. In Dharwad region, 98.30 per cent of parents preferred for the continuation of mid day meal programme followed by 91.70 per cent of parents reported that the meal serving time was convenient and appropriate and 70.00 pe rcent parents reported that their children had learnt good eating habits from school.

In Jhansi region, cent per cent parents preferred for the continuation of mid day meal programme followed

Table 1a. Opinion level of school children about mid day

| meal programme |  | $(\mathrm{n}=120)$ |
| :--- | :---: | :---: |
| Category | Frequency (F) | Percentage <br> $(\%)$ |
| Less favourable $(<25)$ |  | 0.00 |
| Favourable $(26-35)$ | 09 | 7.50 |
| Most favourable $(>35)$ | 111 | 92.50 |



Fig. 1 Opinion level of rural school children about mid day meal programme
by 95.00 per cent parents reported that the menu of the mid day meal has to be changed periodically to include seasonal foods and parents about 93.30 per cent stated that the mid day meal serving time was convenient and appropriate. The overall opinion index was high that is 87.85 percent.

Table 2 also showed that 91.70 per cent parents reported that meal serving time was appropriate and convenient because they did not feel hungry as they had their breakfast from home and in breakfast they usually eats rice items like idli, dosa, avalaki and in Jhansi region children usually ate wheat products in breakfast such as paratha, roti, halwa etc., and in between their breakfast and lunch period sometimes they eat ready to eat food such as chips, namkeen, biscuits etc. and large majority (70.00\%) of parents reported that their children had learnt good eating habits from school. As the teacher supervise the children during lunch time and guide them good eating habits such as washing hands, washing their own plates, eating together, maintaining hygiene, do not waste food etc. This may be the reason for higher number of Dharwad parents ( $98.30 \%$ ) and cent percent parents of Jhansi region preferred continuation of mid day meal programme.

Table 2 a and Fig. 2 indicated the categorization of parents according to their opinion level about mid day meal programme. It can be seen that most of the parents i.e., 89.20 per cent had most favourable opinion about the programme followed by 10.80 per cent parents had favourable opinion about the programme and none of them belonged to less favourable category.

Table 3 indicated the opinion of teachers about mid day meal programme. In Dharwad region, 75.00 per cent of the teachers reported that food grain/cooked food supplied timely and accurately followed by 66.70 per cent teachers reported that children needs food during afternoon was fulfilled through the mid day meal programme and teachers about 58.30 per cent reported that the quality of meal served to students was good in terms of quality of food grains, vegetables etc., quantity of cooked meal/food grains provided to the school is based on the number of school children, proper drinking water was supplied and school had sufficient storage facility for the raw food materials/cooked food.

In Jhansi region, cent per cent of the teachers reported that the quality of meal served to students was good in terms of quality of food grains, vegetables etc., the meal serving time was convenient and appropriate, children needs food during afternoon was fulfilled through mid day meal programme, the quantity of meal served was sufficient, hygiene was

Table 2. Opinion of parents about mid day meal programme

| Statement | Dharwad (n=60) |  |  | Jhansi ( $\mathrm{n}=60$ ) |  |  | Opinion index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Most favourable | Favourable | Not favourable | Most favourable | Favourable | Not favourable |  |
| 1. The meal served to children is good in terms of quality of food grains, vegetables etc. | $\begin{gathered} 28 \\ (46.70 \%) \end{gathered}$ | $\begin{gathered} 32 \\ (53.30 \%) \end{gathered}$ | - | $\begin{gathered} 25 \\ (41.70 \%) \end{gathered}$ | $\begin{gathered} 35 \\ (58.30 \%) \end{gathered}$ | - | 81.39 |
| 2. Children like the taste of mid day meal | $\begin{gathered} 37 \\ (61.70 \%) \end{gathered}$ | $\begin{gathered} 23 \\ (38.30 \%) \end{gathered}$ |  | $\begin{gathered} 55 \\ (91.70 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (8.30 \%) \end{gathered}$ | - | 92.22 |
| 3. The menu of the mid day meal has to be changed periodically to include seasonal foods | $\begin{gathered} 37 \\ (61.70 \%) \end{gathered}$ | $\begin{gathered} 23 \\ (38.30 \%) \end{gathered}$ | - | $\begin{gathered} 57 \\ (95.00 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (5.00 \%) \end{gathered}$ | - | 92.78 |
| 4. The meal serving time is convenient and appropriate | $\begin{gathered} 55 \\ (91.70 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (8.30 \%) \end{gathered}$ | - | $\begin{gathered} 56 \\ (93.30 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (6.70 \%) \end{gathered}$ | - | 97.50 |
| 5. The quantity of meal served is sufficient | $\begin{gathered} 39 \\ (65.00 \%) \end{gathered}$ | $\begin{gathered} 21 \\ (35.00 \%) \end{gathered}$ | - | $\begin{gathered} 50 \\ (83.30 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (15.00 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | 91.11 |
| 6. Mid day meal programme satisfy the necessary food needs of children | $\begin{gathered} 19 \\ (31.70 \%) \end{gathered}$ | $\begin{gathered} 40 \\ (66.70 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | $\begin{gathered} 39 \\ (65.00 \%) \end{gathered}$ | $\begin{gathered} 21 \\ (35.00 \%) \end{gathered}$ | - | 82.50 |
| 7. Hygiene is maintained while serving the meal | $\begin{gathered} 37 \\ (61.70 \%) \end{gathered}$ | $\begin{gathered} 21 \\ (35.00 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (3.30 \%) \end{gathered}$ | $\begin{gathered} 38 \\ (63.30 \%) \end{gathered}$ | $\begin{gathered} 22 \\ (36.70 \%) \end{gathered}$ | - | 86.94 |
| 8. Child's health status has been improved by the mid day meal programme | $\begin{gathered} 17 \\ (28.30 \%) \end{gathered}$ | $\begin{gathered} 41 \\ (68.30 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (3.30 \%) \end{gathered}$ | $\begin{gathered} 34 \\ (56.70 \%) \end{gathered}$ | $\begin{gathered} 24 \\ (40.00 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (3.30 \%) \end{gathered}$ | 79.72 |
| 9. Proper drinking water is supplied | $\begin{gathered} 37 \\ (61.70 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (15.00 \%) \end{gathered}$ | $\begin{gathered} 14 \\ (23.30 \%) \end{gathered}$ | $\begin{gathered} 26 \\ (43.30 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (6.70 \%) \end{gathered}$ | $\begin{gathered} 30 \\ (50.00 \%) \end{gathered}$ | 71.94 |
| 10. After the introduction of mid day meal academic achievement is noticeable | $\begin{gathered} 17 \\ (28.30 \%) \end{gathered}$ | $\begin{gathered} 40 \\ (66.70 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (5.00 \%) \end{gathered}$ | $\begin{gathered} 48 \\ (80.00 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (20.00 \%) \end{gathered}$ | -- | 83.89 |
| 11. Feeling of satiety aroused in children after having meal | $\begin{gathered} 15 \\ (25.00 \%) \end{gathered}$ | $\begin{gathered} 45 \\ (75.00 \%) \end{gathered}$ | - | $\begin{gathered} 54 \\ (90.00 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (10.00 \%) \end{gathered}$ | - | 85.83 |
| 12. Children are learning good eating habits from school | $\begin{gathered} 42 \\ (70.00 \%) \end{gathered}$ | $\begin{gathered} 18 \\ (30.00 \%) \end{gathered}$ | - | 52 | $\begin{gathered} 8 \\ (86.70 \%) \end{gathered}$ | (13.30\%) | 92.78 |
| 13. The social interaction has improved as all the children have their meal together | $\begin{gathered} 39 \\ (65.00 \%) \end{gathered}$ | $\begin{gathered} 20 \\ (33.30 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | $\begin{gathered} 46 \\ (76.70 \%) \end{gathered}$ | $\begin{gathered} 13 \\ (21.70 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | 89.72 |
| 14. Continuation of mid day meal programme is needed | $\begin{gathered} 59 \\ (98.30 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.70 \%) \end{gathered}$ | - | $\begin{gathered} 60 \\ (100.00 \%) \end{gathered}$ | - | - | 99.72 |
| 15. I am satisfied with the mid day meal programme | $\begin{gathered} 37 \\ (61.70 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (38.30 \%) \\ \hline \end{gathered}$ | - | $\begin{gathered} 46 \\ (76.70 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (23.30 \%) \\ \hline \end{gathered}$ | - | 89.72 |
| Overall Opinion index |  |  |  |  |  |  | 87.85 |

Table 2a. Opinion level of parents about mid day meal

| programme |  | $(\mathrm{n}=120)$ |
| :--- | :---: | :---: |
| Category | Frequency | Percentage |
|  | (F) | $(\%)$ |
| Less Favourable (<23) | 0 | 0.00 |
| Favourable $(24-32)$ | 13 | 10.80 |
| Most Favourable $(>32)$ | 107 | 89.20 |

maintained while serving and consuming the meal, child's health status had improved by the mid day meal programme, after the introduction of mid day meal programme academic achievement was noticeable, food grain/cooked food supplied timely and accurately, school had sufficient storage facility for the raw food materials/cooked food, toilet facility and hand washing facility was provided and quantity of mid day meal provided by the government per child/per day was sufficient followed by 90.90 per cent teachers reported that quantity of cooked meal/food grains provided to the school was based on the number of school children. The overall opinion index was high that is 86.41 per cent. Similarly, Bhargav and Bhargav (2011) showed in


Fig. 2 Opinion level of parents about mid day meal programme
their study that 74.00 percent of teacher's were given their opinion that the qualities of providing on were sufficient to the children. In another study, Kantawala et al. (2013) showed similar results that 76.90 per cent teachers opined that health and nutritional status of school children has been improved and 67.70 per cent teachers identified that school attendance of children was improved.
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Table 3. Opinion of teachers about mid day meal programme
( $\mathrm{n}=23$ )

| Statement | Dharwad ( $\mathrm{n}=12$ ) |  |  | Jhansi ( $\mathrm{n}=11$ ) |  |  | $\begin{aligned} & \text { Opinion } \\ & \text { index } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Most favourable | Favourable | Not favourable | Most favourable | Favourable | Not favourable |  |
| 1. Quality of meal served to students is good in terms of quality of food grains, vegetables etc. | $\begin{gathered} 07 \\ (58.30 \%) \end{gathered}$ | $\begin{gathered} 05 \\ (41.70 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 92.75 |
| 2. Quantity of cooked meal/food grains provided to the school is based on the number of school children | $\begin{gathered} 07 \\ (58.30 \%) \end{gathered}$ | $\begin{gathered} 05 \\ (41.70 \%) \end{gathered}$ | - | $\begin{gathered} 10 \\ (90.90 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (9.10 \%) \end{gathered}$ | - | 91.30 |
| 3. The menu of the mid day meal has to be changed periodically to include seasonal foods | - | $\begin{gathered} 12 \\ (100.00 \%) \end{gathered}$ | - | $\begin{gathered} 07 \\ (63.60 \%) \end{gathered}$ | $\begin{gathered} 04 \\ (36.40 \%) \end{gathered}$ | - | 76.81 |
| 4. The meal serving time is convenient and appropriate | $\begin{gathered} 06 \\ (50.00 \%) \end{gathered}$ | $\begin{gathered} 06 \\ (50.00 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 91.30 |
| 5. The quantity of meal served is sufficient | $\begin{gathered} 02 \\ (16.70 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (83.30 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 85.51 |
| 6. Children needs for food during afternoon is fulfilled through mid day meal programme | $\begin{gathered} 08 \\ (66.70 \%) \end{gathered}$ | $\begin{gathered} 03 \\ (25.00 \%) \end{gathered}$ | $\begin{gathered} 01 \\ (8.30 \%) \end{gathered}$ | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 92.75 |
| 7. Hygiene is maintained while serving and consuming the meal | $\begin{gathered} 06 \\ (50.00 \%) \end{gathered}$ | $\begin{gathered} 06 \\ (50.00 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 91.30 |
| 8. Child's health status has been improved by the mid day meal programme | $\begin{gathered} 04 \\ (33.30 \%) \end{gathered}$ | $\begin{gathered} 08 \\ (66.70 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | ${ }^{-}$ | 88.41 |
| 9. Proper drinking water is supplied | $\begin{gathered} 07 \\ (58.30 \%) \end{gathered}$ | $\begin{gathered} 05 \\ (41.70 \%) \end{gathered}$ | - | $\begin{gathered} 06 \\ (54.50 \%) \end{gathered}$ | - | $\begin{gathered} 05 \\ (45.50 \%) \end{gathered}$ | 78.26 |
| 10. After the introduction of mid day meal academic achievement is noticeable | $\begin{gathered} 02 \\ (16.70 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (83.30 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 85.51 |
| 11. Food grain/cooked food supplied timely and accurately | $\begin{gathered} 09 \\ (75.00 \%) \end{gathered}$ | $\begin{gathered} 02 \\ (16.70 \%) \end{gathered}$ | $\begin{gathered} 01 \\ (8.30 \%) \end{gathered}$ | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 94.20 |
| 12. School has sufficient storage facility for the raw food materials/cooked food | $\begin{gathered} 07 \\ (58.30 \%) \end{gathered}$ | $\begin{gathered} 05 \\ (41.70 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 92.75 |
| 13. Toilet facility and hand washing facility is provided | $\begin{gathered} 06 \\ (50.00 \%) \end{gathered}$ | $\begin{gathered} 06 \\ (50.00 \%) \end{gathered}$ | ${ }^{-}$ | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 91.30 |
| 14. Sufficient number of plates and glasses are available for children to have meal | $\begin{gathered} 04 \\ (33.30 \%) \end{gathered}$ | $\begin{gathered} 07 \\ (58.30 \%) \end{gathered}$ | $\begin{gathered} 01 \\ (8.30 \%) \end{gathered}$ | $\begin{gathered} 06 \\ (54.50 \%) \end{gathered}$ | - | $\begin{gathered} 05 \\ (45.50 \%) \end{gathered}$ | 72.46 |
| 15. The fund provided for the mid day meal programme is sufficient | $\begin{gathered} 02 \\ (16.70 \%) \end{gathered}$ | $\begin{gathered} 09 \\ (75.00 \%) \end{gathered}$ | $\begin{gathered} 01 \\ (8.30 \%) \end{gathered}$ | $\begin{gathered} 06 \\ (54.50 \%) \end{gathered}$ | - | $\begin{gathered} 05 \\ (45.50 \%) \end{gathered}$ | 69.57 |
| 16. Quantity of meal provided by the government per child/per day is sufficient | $\begin{gathered} 04 \\ (33.30 \%) \end{gathered}$ | $\begin{gathered} 08 \\ (66.70 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (100.00 \%) \end{gathered}$ | - | - | 88.41 |
| Overall Opinion index |  |  |  |  |  |  | 86.41 |

The probable reason may be that they had observed that mid day meal programme has became successful in fulfilling the objectives of improving attendance, enrolment, health status, maintaining hygiene and good eating habits.

Table 3a and Fig. 3 indicated the categorization of teachers according to their opinion level about mid day meal programme. It can be seen that more number of teachers i.e., 78.30 percent had most favourable opinion about the programme followed by 21.70 per cent teachers had favourable opinion about the programme and none of them belonged to less favourable category.

Table 4 shows the opinion of community leaders about mid day meal programme. In Dharwad region, highest percentage of community leaders i.e. 95.00 percent reported that there was an improvement in nutritional status of children after introducing the mid day meal programme and student absenteeism had

Table 3a Opinion level of teachers about mid day meal programme

|  |  | $(\mathrm{n}=23)$ |
| :--- | :---: | :---: |
| Category | Frequency <br> (F) | Percentage <br> $(\%)$ |
| Less Favourable $(<26)$ | 0 | 0.00 |
| Favourable $(27-36)$ | 05 | 21.70 |
| Most Favourable $(>36)$ | 18 | 78.30 |



Fig. 3 Opinion level of teachers about mid day meal programme
decreased after introducing mid day meal programme in the school followed by 85.00 per cent of the community leaders stated that enrolment of children had increased after introducing the mid day meal programme and adequate washing and toilet facilities were available in the school and 80.00 percent community leaders reported that the menu of the meal was nutritious and seasonal food was took into consideration, attendance of children had improved due to mid day meal programme and adequate drinking water facilities were provided.

In Jhansi region, cent per cent of the community leaders reported that the supervision of the mid day meal programme occurred regularly regarding quality

Table 4. Opinion of community leaders about mid day meal programme

| Statement | Dharwad ( $\mathrm{n}=20$ ) |  |  | Jhansi ( $\mathrm{n}=20$ ) |  |  | $\begin{aligned} & \text { Opinion } \\ & \text { index } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Most favourable | Favourable | Not favourable | Most favourable | Favourable | Not favourable |  |
| 1. Supervise the mid day meal programme regularly regarding quality of food supplied to the school | $\begin{gathered} 15 \\ (75.00 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (25.00 \%) \end{gathered}$ | - | $\begin{gathered} 20 \\ (100.00 \%) \end{gathered}$ | ${ }^{-}$ | - | 95.83 |
| 2. Menu of the meal is nutritious and takes into consideration the seasonal food | $\begin{gathered} 16 \\ (80.00 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (20.00 \%) \end{gathered}$ | - | $\begin{gathered} 19 \\ (95.00 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (5.00 \%) \end{gathered}$ | - | 95.83 |
| 3. The quantity of meal served is sufficient | $\begin{gathered} 15 \\ (75.00 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (25.00 \%) \end{gathered}$ | - | $\begin{gathered} 20 \\ (100.00 \%) \end{gathered}$ | - | - | 95.83 |
| 4. Hygiene is maintained while serving the meal | $\begin{gathered} 12 \\ (60.00 \%) \end{gathered}$ | $\begin{gathered} 8 \\ (40.00 \%) \end{gathered}$ | - | $\begin{gathered} 19 \\ (95.00 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (5.00 \%) \end{gathered}$ | - | 92.50 |
| 5. There is improvement in nutritional status of children after introducing the mid day meal programme | $\begin{gathered} 19 \\ (95.00 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (5.00 \%) \end{gathered}$ |  | $\begin{gathered} 18 \\ (90.00 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (10.00 \%) \end{gathered}$ | - | 97.50 |
| 6. Enrolment of children has been increased after introducing the mid day meal programme | $\begin{gathered} 17 \\ (85.00 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (15.00 \%) \end{gathered}$ | - | $\begin{gathered} 15 \\ (75.00 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (15.00 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (10.00 \%) \end{gathered}$ | 91.67 |
| 7. Attendance of children has been improved due to mid day meal programme | $\begin{gathered} 16 \\ (80.00 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (20.00 \%) \end{gathered}$ | - | $\begin{gathered} 18 \\ (90.00 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (10.00 \%) \end{gathered}$ | - | 95.00 |
| 8. Classroom learning after eating meals has become interesting | $\begin{gathered} 14 \\ (70.00 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (30.00 \%) \end{gathered}$ | - | $\begin{gathered} 20 \\ (100.00 \%) \end{gathered}$ | - | - | 95.00 |
| 9. There is improvement in academic performance of children after introducing mid day meal programme | $\begin{gathered} 14 \\ (70.00 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (30.00 \%) \end{gathered}$ | - | $\begin{gathered} 18 \\ (90.00 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (10.00 \%) \end{gathered}$ |  | 93.33 |
| 10. Frequently problems arises in mid day meal programme regarding supply of poor quality food grains, vegetables, improper or unavailability of kitchen in frastructure, no storage facility etc. | (100.00\%) | (50.00\%) | 20 | $\begin{gathered} 10 \\ (50.00 \%) \end{gathered}$ | - | 10 | 50.00 |
| 11. Timely availability or supply of food material/cooked food in the school | $\begin{gathered} 8 \\ (40.00 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (10.00 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (50.00 \%) \end{gathered}$ | $\begin{gathered} 20 \\ (100.00 \%) \end{gathered}$ | - | - | 81.67 |
| 12. Adequate drinking water facilities are provided. | $\begin{gathered} 16 \\ (80.00 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (20.00 \%) \end{gathered}$ | - | $\begin{gathered} 9 \\ (45.00 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (5.00 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (50.00 \%) \end{gathered}$ | 79.17 |
| 13. Adequate washing and toilet facilities is available in the school | $\begin{gathered} 17 \\ (85.00 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (15.00 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (55.00 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (45.00 \%) \end{gathered}$ | - | 90.00 |
| 14. Student absenteeism has been decreased after introducing mid day meal programme in the school | $\begin{gathered} 19 \\ (95.00 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (5.00 \%) \end{gathered}$ | - | $\begin{gathered} 11 \\ (55.00 \%) \end{gathered}$ | $\begin{gathered} 8 \\ (40.00 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (5.00 \%) \end{gathered}$ | 90.00 |
| 15. Nutrition and variety in menu is provided to make the mid day meal more interesting for the school children | $\begin{gathered} 17 \\ (85.00 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (15.00 \%) \end{gathered}$ | - | $\begin{gathered} 20 \\ (100.00 \%) \end{gathered}$ | - | - | 97.50 |
| Overall Opinion index |  |  |  |  |  |  | 89.39 |

of food supplied to the school, nutrition and variety in menu was provided to make the mid day meal more interesting for the school children, there was timely availability or supply of food material/cooked food in the school, classroom learning after eating mid day meals had became interesting and the quantity of mid day meal served was sufficient. The overall opinion index was $89.39 \%$ i.e., their opinion is to the extent of 89.39 per cent. Raju (2009) studied the best practices in the implementation of mid-day meal scheme in Assam revealed the similar results that School Management Committee members/community leaders taking keen interest in supervising mid day meal activities such as conducting monthly meetings, involvement of mother's group for the development of the school, head teacher is maintaining all the records regarding MDM (Mid Day Meal), providing quality food under MDM (Mid Day Meal) programme, maintaining the hygienic condition in the kitchen by the cook, quantity and quality of the meal community contribution to the school, using water filter for drinking water purpose which leads to good nutritional and health status of school children.

As the community leaders observed that children were coming to school daily because they like to study and having fun with their classmates and eating mid day meal together which could be the reason for improvement in nutritional status and attendance of the children.

Nath and Nath (2015) reported in their study that the community leaders have expressed their opinion in support of introducing of mid-day meals scheme at the primary level. The Mid-Day Meals programme helps in increasing the attendance and enrolment of the poor students. The community leaders have unanimously positive attitude towards this mid-day meals scheme. In Jhansi region, cent percent community leaders reported that the supervision of mid day meal programme occurred regularly regarding quality of the food supplied to the school, nutrition and variety in menu was provided to make the mid day meal more interesting for school children and the quantity of meal served was sufficient. The probable reasons may be that in case of supervision, food is tasted first of all by any of the teachers/community leaders, if the food is safe then only it is served to children. State Governments updating the menu time to time to make it more nutritious and to break the monotony of the menu so that children would take interest in eating the meal. After eating the

Table 4a. Opinion level of community leaders about mid

| day meal programme |  | $(\mathrm{n}=40)$ |
| :--- | :---: | :---: |
| Category | Frequency | Percentage |
|  | (F) | $(\%)$ |
| Less Favourable $(<25)$ | 0 | 0.00 |
| Favourable $(26-35)$ | 03 | 7.50 |
| Most Favourable $(>35)$ | 37 | 92.50 |

meal classroom learning became more interesting this is because of the reason that children do not feel hungry and are able to concentrate in classroom learning because they were not thinking about the food. Sufficient quantity of meal is served to children because it is not fixed that they should take the food only one spoon or only for single time if they still feel hungry they can take more than one spoon and eat properly. The overall opinion index of community leaders was 89.39 percent which is highly noticeable.

Similarly, Pinisetty (2015) in his study on community participation in mid day meal scheme: exclusion and inclusion in Andhra Pradesh concluded that all the active community leaders in the participation of MDM(Mid Day Meal) programme in schools were satisfied with the quality and quantity of cooked MDM(Mid Day Meal). In schools where kitchen gardens were grown, the meal becomes enriched with locally available vegetables and fruits with the participation of children, teachers and community.

Table 4 a and Fig. 4 indicated the categorization of community leaders according to their opinion level about mid day meal programme. It can be observed that majority of community leaders i.e., 92.50 percent belonged to most favourable category followed by 7.50 percent community leaders belonged to favourable category and none of them belonged to less favourable category.

Thus, it can be concluded that the mid day meal programme helps to change the mind sets of children which leads to change the mind set of parents and hence of the community about education and nutritional aspects of the children. For the students of this age group the food provided through this programme in the school becomes one of the extrinsic motivation factors and therefore it increases their enthusiasm for the study. Hence, this scheme should be continued. As the hunger of the child gets satisfied, it helps to improve attentiveness, memory and learning, particularly in the context in which many children came to school on an empty stomach in the morning. Opinions of the rural school children, parents, teachers and community leaders should be consider as the most important aspect because it will surely help to the Government in improving the policies and guidelines of mid day meal programme for the betterment of the children with respect to nutritional and educational benefits. Children can also learn hygienic eating habits related both to personal hygiene and understanding the importance of the cleanliness of the surrounding areas.


Fig. 4 Opinion level of community leaders about mid day meal programme

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