Chapter V

SUMMARY AND CONCLUSION

5.0 Introduction

Elementary education has become a justifiable Fundamental Right. The provisions contained in the Constitution of India, insists on providing elementary education to all children. Universalization of Elementary Education has been accepted as a national goal in India since Independence. Elementary education is important because it ensures that people are not illiterate but more important is the quality of education they get determines the level of their intellectual capacity when they are adults. Having access to this basic knowledge helps people in making wise decisions regarding issues they face later in life. Usually the skills, attitudes and knowledge that a children gain in elementary schools paves a way for high school and college material and it also provides a foundation for success in the future. There are many government interventions which aim towards achieving elementary education. Some of them are:- District Primary Education Programme, Operation Blackboard, Sarva Shiksha Abhiyan, RTE 2009.

The Midday Meal Scheme is also one of the government intervention programme primarily meant for the up-liftmen of elementary education. MDM scheme is a school meal programme of the Government of India designed to improve the nutritional status of school-age children nationwide. The programme supplies free lunches on working days for children in primary and upper primary classes in government, government aided, local body Education Guarantee Scheme, and alternate innovative education centres. The scheme has immense association with the elementary schools enrolment, attendance, retention, nutrition, social equity and imbibing good qualities among the learners. There are several studies which have
been conducted in the field of Mid Day Meal and nutritional related topics at the elementary education. Many of the studies have positive indication relating to MDM and improvement in elementary education. **Chugh (2008)** conducted a study on the implementation of Mid-Day Meals Scheme at Primary School and found that MDM has been successfully implemented in Maharashtra state with the involvement and active participation of Village education Committee/ Ward Committees, Parents, Community. Self Help Group and NGOs are contributing positively in the successful execution of the mid day meal scheme. **Chugh (2008)** conducted a study in the Implementation of Mid-Day Meal Programme in Punjab. The major finding was that the MDM effectively alleviated classroom hunger and persuading poor families to send their children to school, the cooks employed in many places are Dalit women, reduced dropout rate and shown improvement in retention and curbed teacher absenteeism and narrowed social distances. **Mallik (2008)** studied on the overall Implementation of Mid Day Meal Programme in Orissa and result showed that all the schools visited are having attendance rate of 80% and above. Children are much disciplined while taking food and washing their hands before and after food, all the schools have purchased the utensils for the mid day meal programme and VEC members also visit the school during the lunch hours to oversee the MDM programme. **Josephine (2008)** found that Mid Day Meal programme in Arunachal Pradesh in papumpare district is quite satisfactory. Attendance of the learners has been improved and suggested that there is need to have some matching between the supply of food grains and demand for the food grains and conversion money. The regularity in providing Mid Day Meal is required to be maintained. **Bonds (2012)** has done a study on Food for Thought: Evaluating the Impact of India’s Mid-Day Meal Program on Educational Attainment and he found that children who receive the
program are worse-off in development measures than those who do not and Girls are more likely to receive the program than boys, and children living in rural areas are more likely to receive the program than children living in urban areas. **Sahoo (2015)** completed a study on Effectiveness of Mid-day Meal Programme and found that few teachers are not satisfied with the mid-day meal programme they feel it as extra burden which hampered the regular classes. And there is no significant association between student’s satisfaction level & the demographic variable. **Verma (2015)** made a study on impact of mid day meal programme in India and result revealed that there exist a positive relationship between mid day meal program and enrolment and attendance of students in schools including education and health outcomes of students.


In view of the total description and studies conducted in India and abroad on MDM, the researcher was keenly interested to take up the following research study in hand as there is no any such study conducted in Arunachal Pradesh in particular and North East India in general on the same nature of research problem.
5.1 Statement of the problem

Mid Day Meal Programme in Arunachal Pradesh: A Critical Study

5.2 Objectives of the study

The researcher formulated the following objectives in accordance to the nature of the research problem. They were

1. To study the enrolment and coverage of children under MDM scheme in Arunachal Pradesh.
2. To find out the regularity of MDM in primary and upper primary schools.
3. To study the quality of MDM in Arunachal Pradesh.
4. To investigate the problems in implementation of MDM in Arunachal Pradesh.
5. To study the physical infrastructure for mid day meal in schools.
6. To study the participation of SMC’s and Parents in MDM programme.
7. To study the attitude of teachers and community members towards MDM scheme.

5.3 Hypotheses of the Study

In the view of above objectives of this study, the researcher formulated the following hypotheses:

i. The elementary teachers have favorable attitude towards MDM scheme.

ii. There is no significant difference in the attitude of male and female elementary school teachers towards MDM scheme.

iii. The community members have favorable attitude towards MDM scheme.
iv. There is no significant difference in the attitude of male and female community members towards MDM scheme.

v. There is no significant difference in the attitude of non-tribal and tribal community members towards MDM scheme.

5.4 Delimitations of the Study

The present study was delimited to:

i. Three districts of Arunachal Pradesh, i.e. East Siang, West Siang and Papumpare only.

ii. Primary and upper primary schools of selected districts only.

iii. 600 teachers and 600 community members of 3 districts only.

5.5 Operational Term Used

The term used in the present study are defined as follows:

i. **MDM**: MDM stands for Mid Day Meal programme. It is a free school meal programme designed to improve the nutritional status of school age children nationwide.

ii. **Elementary school**: The schools which covered children studying Class I to VIII run by the government of Arunachal Pradesh.

iii. **Attitude**: Attitude usually means disposition or state of mind. In MDM we use attitude as tendency to react favorably or unfavorably towards MDM scheme.

iv. **Quality**: Quality talks about the standard of something as measured against other things of a similar kind; the degree of excellence of something. In MDM
we talk about the exact amount ingrdians and variety prescribed by government of India to be given to children in MDM scheme.

v. **Children:** A young persons especially between infancy and youth are called children. Here, in the study we mean children of class 1 to VIII who are studying in schools run by the government of Arunachal Pradesh.

vi. **Physical infrastructures:** Infrastructure talks about the basic facilities, services and installation needed for the functioning of a community or society.

In MDM infrastructures includes kitchen shed, Utensils, Gas, firewood.

**5.6 Methodology**

In the view of the nature of the present study, the investigator adopted the descriptive cum normative survey method of educational research.

**5.6.1 Population of the Study:**

The population of the study consisted of East Siang having 9,619 students and 613 teachers, West Siang 7,717 students and 560 teachers and Papumpare having 16,160 students and 870 teachers respectively. The details are shown as below :-

<table>
<thead>
<tr>
<th>Districts</th>
<th>Total No. of Schools (i-viii)</th>
<th>Total No. of Students in Elementary School (I - viii)</th>
<th>Total No. of Teachers at Elementary Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Siang</td>
<td>203</td>
<td>9,619</td>
<td>613</td>
</tr>
<tr>
<td>West Siang</td>
<td>257</td>
<td>7,717</td>
<td>560</td>
</tr>
<tr>
<td>Papumpare</td>
<td>297</td>
<td>16,160</td>
<td>870</td>
</tr>
</tbody>
</table>

*Source: District Elementary Education Report Card: 2012-2013*
5.6.2 Selection of Sample

Sample is total representation of the population. It is not possible to collect data from all the total population of any research study, hence the researcher has to take the selected group of individuals who would represent the whole population which is termed as sample. The scholar with utmost care selected the sample of her study. The universe of the present study covered all Primary and Upper Primary Schools of 3 Districts i.e. East Siang, West Siang and Papumpare of Arunachal Pradesh (33%) was selected by adopting random sampling technique. The three districts were selected on the basis of literacy rate and geographical location. The selected sample from each district i.e. East Siang, West Siang and Papumpare have been shown in the table - 3.01, 3.02, 3.03, 3.04 and 3.05 respectively.

Table No 3.02: Showing the selected sample of Students and Teachers from East Siang, West Siang and Papumpare Districts of Arunachal Pradesh

<table>
<thead>
<tr>
<th>Districts</th>
<th>Total No of Schools</th>
<th>Total No. of selected Schools in percentage</th>
<th>Total No. of Students</th>
<th>Total No of selected Students in Elementary school</th>
<th>Total No. of Teachers</th>
<th>Total No of Selected Teachers at Elementary schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Siang</td>
<td>203</td>
<td>24.63</td>
<td>9,619</td>
<td>2.07 (i.e. 50 schools)</td>
<td>613</td>
<td>32.62</td>
</tr>
<tr>
<td>West Siang</td>
<td>257</td>
<td>19.45</td>
<td>7,717</td>
<td>2.59 (i.e 50 schools)</td>
<td>560</td>
<td>35.71</td>
</tr>
<tr>
<td>Papumpare</td>
<td>297</td>
<td>16.83</td>
<td>16,160</td>
<td>1.23 (i.e. 50 schools)</td>
<td>870</td>
<td>22.99</td>
</tr>
</tbody>
</table>

Source: District Elementary Education Report Card: 2012-2013
5.6.3 Tools Used in the Study:

For the completion of the study, the researcher needs desired data and these data are possible to be collected from the field by making use of various tools. The reliability and validity of the finding of any piece of research works depend upon the selection and an appropriate use of tools for data collection. It is important to keep in mind the objectives of the study at the time of selection of tools as the data are to be collected for meeting the requirements of the formulated objectives. Hence the researchers need to be very careful about the selection of tools for his/her research works. In view of these aspects, the researcher selected and developed some of the tools for the purpose of the collection of reliable and valid data as required. The investigator used the following tools:

1. Questionnaire for teacher in charge and community members

2. Attitude scale to measure the attitude of teachers community members towards MDM Programme in Arunachal pradesh

The researcher developed all the tools by herself.

5.6.4 Administration of Questionnaire

The researcher developed one questionnaire for the MDM in-charge. There are 52 questions in the questionnaire and it was divided into five sections – A, B, C, D and E. For the administration of questionnaire, the researcher visited 150 primary and upper primary schools of Arunachal Pradesh. At first, the researcher personally gave the questionnaire to the MDM in-charge and before they attempt it, the researcher explained the instructions written on the front page of the questionnaire. Though the
questionnaire doesn’t have time limit yet the respondent was requested to complete it as early as possible. In this way, the researcher collected the data from 150 schools of three districts in Arunachal Pradesh.

5.6.5 Administration of attitude scale

As per the nature of the study, the research scholar collected the data from the sample taken from the three districts of Arunachal Pradesh. To know the attitude towards MDM, the attitude scale was administered on 600 teachers of both primary and upper primary schools and 600 community members in Arunachal Pradesh. The researcher gave the attitude scale to each teachers and community members personally. Before attempting the attitude scale, the researcher explained the meaning and purpose of attitude scale. Further, they were asked to go through the instruction given on the front page of the attitude scale. If any doubt prevails it was clarified there and then. All the community members and teachers attempted the attitude scale as per the instruction of the research scholar.

In this way, the researcher collected the attitude scale of 600 teachers and 600 community members towards MID Day Meal programme in Arunachal Pradesh.

5.6.5 Statistical Techniques Used

After collection of the data, the researcher used statistical techniques such as measures of central tendency –mean, Measures of variability –Standard deviation,’t’ test for analysis and interpretation of the results

5.7 Major findings and discussion

The major findings of the study are put as under:

Objective – 1: To study the enrolment and coverage of children under MDM scheme in Arunachal Pradesh
1. The above table - 4.01 shows that the enrolment, attendance and coverage of children under MDM programme in three selected districts i.e. East Siang, West Siang and papumpare of Arunachal Pradesh. The result of the three districts came out to be quite satisfactory. Out of the total enrolment (100%), the number of students availing MDM on the day of visit came out to be 98.08%, 96.08% and 98.84% respectively but in totality of three districts, it came out as 97.79% which is quite eye catching and the overall students who were absent and not availing MDM on the day of visit was only 2.26%, which is very small in number. It has been also observed that free lunch programme in school turn out to be the strongest determinant affecting the enrolment and attendance of the students. It has been observed that the attendance of the class is full when MDM is served in some schools but it is so when MDM is not provided. After interviewing the teachers and community members it is also found that, the enrolment and the increased gradually after the introduction of MDM in schools. Schools situated in rural areas where parents engage their children on work now started to send them to the schools because of free meal programme. They opined that they would like to enroll their children to the schools where MDM is provided on all working days.

2. An analysis into the Table - 4.08 and figure – 4.1, it is revealed that the total number of students (7,974) were availaling MDM on the day of visit out of the total 50 selected sample schools. Therefore, in East Siang District the percentage of children availing MDM on the day of visit happened to be 98% and the student’s absence and not availing MDM on the day of visit was only 1.5%, which is very small number. This indicates that the MDM scheme implementing in East Siang district shows a mark of satisfaction. The total
number of student’s attendance and availing of MDM on the day of visit is highest in this district as compared to other two sampled districts of Arunachal Pradesh. Most of the teachers, students and community members were aware and took active participation to supervise the MDM provided to the children, on account of which MDM have been served to the children in East Siang District was quite satisfactory which covered almost all the students of Elementary Schools.

3. Table – 4.10 and figure – 4. 2 shows that the total number of (4,587) were availing MDM on the day of visit from the total 50 selected sample schools. Therefore, in West Siang District the percentage of Children availing MDM on the day of visit happened to be 96.08%, and the student’s were not availing MDM on the day of visit was 4.07%, which is very small in number. This indicates that the MDM scheme implementing in West Siang District also shows satisfactory result. The investigator have visited maximum of the schools situated in interior places and found that students changed their schools to the school where MDM is served regularly. MDM and enrolment showed a great association in this district. Parents, teachers and community members near the town area were quite aware of the term MDM and take interest in visiting the schools to inspect the programme but due to lack of awareness on the part of parents and illiteracy, the MDM provided to the students in rural areas were poor in quality and have no variety.

4. Table - 4.12 and figure – 4.3 revealed that the total number of 5,389 were availing MDM on the day of visit from the total 50 selected sampled schools. Therefore, in Papumpare district the percentage of Children availing MDM on
the day of visit happened to be 98.84% and 1.17% of Children do not avail MDM on the day of visit. This indicates that the MDM scheme implementing in Papumpare district shows satisfactory result. Being the capital of the state, active participation of parents, teachers and community members were found. The relationship between MDM and enrolment showed a strong base on all the schools situated in rural areas. During interview it was found that one child opined the view that they are dependent on MDM for breakfast as their parents left home for early and rice was not always plenitly available two times of meal. 100% enrolment and attendance was found in all the schools because of MDM, on account of which MDM have been served to the children in Papumpare district was quite satisfactory.

**Objective – 2:** To find out the regularity of MDM in primary and upper primary schools

5. The table - 4.02 shows the regularity of MDM in primary and upper primary schools in three selected districts of Arunachal Pradesh. The researcher took a sample of 150 Primary and Upper Primary Schools from three Districts by using random sampling technique. Out of the selected 150 schools, it was found that the regularity of serving MDM to children came out to be regularly 40%, alternatively 53.33% and others 6.67% respectively. That means 40% of the schools served MDM regularly, 53.33% of the schools served alternatively and 6.67% of the schools served MDM in their schools sometimes only. The result also revealed that after receiving the allocation of food grains from the government of India, the State Government reallocated the food grains on the
basis of number of working days in the schools of three Districts. The MDM was served during the lunch break around 12-1 pm and in the morning shift it was served from 9 a.m. The teachers and Governments Officials Opined that the food was served regularly but when the investigator interviewed with the students and community members, it was found that in most of the Schools it was served alternatively or sometimes. The teacher in charge clarified the reason for not serving regularly was the absence of cook cum helpers, hectic task to receive the food grain from the suppliers, serve the food and to maintain the discipline in the school. Therefore, the overall regularity in serving MDM was found to be not satisfactory which only 40% was. This was matter of great concern.

6. Table – 4.14 and figure – 4.4 reveal that the regularity of MDM in East Siang District was average. The researcher took a sample of 50 Primary and Upper Primary Schools of East Siang District by using random sampling technique. Out of the selected 50 schools it was found that the regularity of serving MDM to children came out to be regularly 50%, alternatively 48% and others 2% respectively. That means 50% of the schools served MDM regularly, 48% of the schools served alternatively and 2% of the schools served MDM in their school sometimes only. The percentage of serving MDM was highest in this district in comparison to other two districts. 80% of the teachers in charge were very much concerned for not serving regularly because of the delay in conversion cost, they have to run the MDM by taking loan from the shopkeepers but if they stop to do further some teachers run MDM by their pocket money also.
7. Table – 4.16 and figure – 4.5 show that the regularity of MDM in West Siang District was not up to the mark and quite dissatisfactory. The researcher took a sample of 50 Primary and Upper Primary Schools of west Siang district by using random sampling technique. Out of the selected 50 schools it was found that the regularity of serving MDM to children came out to be regularly 28%, alternatively 76% and others 6% respectively. That means 28% of the schools served MDM regularly, 76% of the schools served alternatively and 6% of the schools served MDM in their schools sometimes only. The percentage of serving MDM was lowest in this district in comparison to other two districts, only 28%. Students and community members were of the opinion that they did not have option even if they did not like the lunch provided by the schools. Maximum teachers in charge were opined that hilly and poor transportations are the main causes of irregularity of MDM in this district.

8. Table - 4.18 and figure – 4.6 reveal that the regularity of MDM in Papumpare District came out to be poor. The researcher took a sample of 50 Primary and Upper Primary Schools of Papumpare District by using random sampling technique. Out of the selected 50 schools it was found that the regularity of serving MDM to children came out to be regularly 42%, alternatively 46% and others 12% respectively. That means 42% of the schools served MDM regularly, 46% of the schools served alternatively and 12% of the schools served MDM in their schools sometimes only. Schools located near the town served MDM on daily basis and maintained all the norms prescribed as it is but some of the interior blocks, the performance of the schools was poor which was not expected in a capital district. 80% of the teachers and community members were of the opinion that all the developments fund were
diverted to the twin towns i.e itanagar and naharlagun and because of transportation and other problems there is poor infrastructure development in the rural schools on account which many teachers and students do not like to study and stay in this kind of environment.

**Objective 3: To study the quality of MDM in Arunachal Pradesh**

9. Table – 4.03 (a) and 4.03 (b) indicate about the quality, quantity and variety of MDM in three selected districts of Arunachal Pradesh. The quality of MDM was found satisfactory as majority 86% of respondents responded positively and 14% of respondent responded negatively. Large number of teachers and parents felt that the MDM has increased nutritional status of the students. They were unable to provide the nutritional food as provided by the schools and expressed that the programme should continue further. Some of the students and parents viewed that quality of food was below average and often watery food was served. As a result 5% - 10% of the students were not consuming MDM regularly. The study also found that some of the Parents did not allow to eat MDM in schools. Majority of schools (65.33%) possessed buffer stock and 34.66% did not posses buffer stock, because of transportation problems. Therefore, the teachers in-charge of MDM, convert food grain into money and he procured MDM items at the village on account which many schools could not provide variety items for MDM. When asked about the variety of food grains 18.66% respondent said ‘Yes’ and 82.66% respondent said ‘No’, that shows that most of the school served same type of food (MDM) to the students. In all the schools MDM was served in the form of khecheri which is mixture of Rice, Dal, seasonal vegetables with some
ingredients. 100% respondents opined ‘Yes’ on Dal, Rice and Vegetables. In (27.33%) schools eggs and (42.66%) other items like biscuits, chana, peanuts were provided. Many parents and students suggested that fruits should be provided once in a week. Teachers in charge were of the opinion that cooking cost provided to them was not sufficient enough to provide hot cooked nutritious meal daily.

10. The above table – 4.19 (a) and 19(b) depicts that the quality of MDM served in East Siang district is quite satisfactory. Out of 50 schools, 40 responded ‘Yes’ and 6 respondents expressed ‘No’. This means that 88% students were satisfied with the quality and taste of the food. The teachers were also sharing MDM as per the rule of Govt before serving to the students. 36 out of 50, selected schools possessed buffer stock which means 72% schools had buffer stock system in their schools while 14 schools (28%) did not have buffer stock in their schools. Out of 72% schools, 40% schools had pucca store rooms and 32% schools managed to make old and unused classroom as store room. Buffer stocks were maintained for the monsoon seasons only. On the other hand 20% of the schools responded ‘Yes’ to the variety of menu which means 80% of the schools provided same type of food (khecheri) with 100% rice, 100% dal, 100% seasonal vegetables with some ingredients. In 30% of the schools, eggs were served sometime and 48% of the schools responded that they did provide biscuits, seasonal fruits, chana, peanuts, bread etc if they had enough fund.

11. Table – 4.20(a) and 20(b) indicate about the quality of MDM served in West Siang district was quite satisfactory. Out of 50 schools, 43 schools responded
to ‘Yes’ and 7 schools respondent to ‘No’. This means 86% students were satisfied with the quality and taste of the food sometimes. Teachers and community members also ate with them. 27 out of 50, selected schools possessed buffer stock that indicates 54% have buffer stock system in their schools, while 23 schools (46%) did not have buffer stock system in their schools. 50% of the schools had self constructed kachha store houses and 4% were using extra classrooms to store their food grains. 14% of the schools had responded to ‘Yes’ to the variety of menu which means (86%) of the schools provided same type of food (khecheri) with 100% rice, 100% dal, 100% seasonal vegetables with some ingredients. In 26% of the schools, eggs were served sometime and 36% of the schools responded that they did provide biscuits, seasonal fruits, chana, peanuts etc if they had enough fund.

12. Table – 4.21 (a) and 21(b) indicate about the quality of MDM served in Papumpare district was quite satisfactory. Out of 50 schools, 42 schools responded to ‘Yes’ and 8 schools respondent to ‘No’. This indicates that the majority of 84% of students were satisfied with the quality and taste of the food served in the schools. Teachers in the schools also shared the same meal with students sometimes before serving MDM. 35 out of 50, selected schools possessed buffer stock which shows that 70% had buffer stock system in their schools while 15 schools (30%) did not have buffer stock system in their schools. Out of 70%, 40% had pucca store rooms and 30% managed to make old and unused classrooms as store rooms. According to the study, few teachers in-charge also store the food grains at their quarters or rented houses. Sometimes robbery was taken place for those cases. Buffer stocks were maintained for the monsoon seasons. 18% of the schools had responded to
‘Yes’ to the variety of menu which means 82% of the schools provided same type of food (khecheri) with 100% rice, 100% dal, 100% seasonal vegetables with some ingredients. In 30% of the schools, eggs were served sometime and 48% of the schools responded that they did provide biscuits, seasonal fruits, chana, peanuts, meat, sweet, bread etc if they had enough fund.

Objective 4: To Study the Problems in Implementation of MDM in Arunachal Pradesh

13. Table - 4.04 (a) and 4.04 (b) Shows the problems faced by the schools while implementing MDM in three selected districts of Arunachal Pradesh. Conversion cost is utilized for the procurement of cooking ingredients such as salt, fuel, vegetables etc from the local market. Regarding the timely dispatch of conversation cost, all 150 schools responded to ‘Yes’. This means no schools have received conversion cost in time. They received it either half yearly or annually. The amount of conversion cost was very less. Due to delay and less amount of conversion cost schools could not provide nutritious meal regularly. So, all 150 schools desired for enhancement in conversion cost. The monthly incentive paid to the cook cum helper was also not regular. All 150 schools responded negatively on regularity of payment. They opined that they are paid Rs 50 per day. The low and irregular payments discouraged them to come regularly and discharge their duty sincerely. In 30% to 40% of the schools two students involvement helped preparation and serving MDM. All the 150 visited schools desired for the hike in the incentive for cooks/helpers as shown in Table 4.19 (a). On the other hand surprise visit and regular inspection was made in122 (81.33%) schools by the officials and in 28
schools it was not made regularly but occasionally. They verified the records about (i) quality of food grains received and utilized (ii) ingredients purchased and utilized (iii) number of children given MDM (iv) community members involvement in the programme etc. Out of 150 schools only 53(35.33%) schools had good transportation facilities other 97(64.66) schools did not have transportation facilities. So the 97 schools have to maintain buffer stock especially for the monsoon seasons. 54% of schools had regular water supply and 46% did not have regular water supply. This was the reasons why approximately 50% – 70% of students did not wash their hands before eating. 100% of the schools responded positively on the regular delivery of rice & other items from the governments.

14. Table – 4.22 (a) and 4.22 (b) show the problems faced by East Siang district while implementing MDM in the schools. The conversion cost has been delivered but never on time. All 50 schools have responded negatively on the regular release of conversion cost and 50 schools had responded positively on the enhancement of conversion cost as it is too low. 100% of the schools responded negatively on the regularity of Monthly incentives for cooks/Helpers and 100% have responded positively on the hike in incentive for cooks/Helpers. On humanitarian ground some teachers paid them from their own pocket money and later recovered it when conversion cost comes. Regular inspection was found quite satisfactory, almost 80%. The investigator happened to meet some of the officials on duty while collecting data. Regular transportation facilities are found only in 36% located nearby highway and 64% did not have transportation facilities, located in the interior parts. 100% of the schools responded negatively on the maintenance fund for the kitchen
and replacement of old utensils. No school had ever received any fund and the schools were adjusting it with the conversion cost by lowering the quality of MDM and availability of utensils were found but in bad conditions. All schools had responded positively on the regular delivery of rice & other items. It was always received on time.

15. Table – 4.23 (a) and 4.23 (b) reveal the problems faced by West Siang district while implementing MDM in the schools. The conversion cost has been delivered but never on time. All 50 schools have responded negatively on the regular release of conversion cost and 50 schools have responded positively on the enhancement of conversion as it is too low. 100% of the schools responded negatively on the regularity of Monthly incentives for cooks/Helpers and 100% have responded positively on the hike in incentives for cooks/Helpers. On humanitarian ground some schools adjusted it from the school fund and later recovered it when conversion cost released to the account. In 76% of schools, regular inspection was found quite satisfactory. In a few interior schools inspection was made occasionally or through phone conversation otherwise. Regular transportation facilities were found only in 13% located nearby highway schools and 37% did not have transportation facilities. 100% of the schools responded negatively on maintenance fund for the kitchen and replacement of old utensils. No school had ever received any fund, and schools were adjusting it with the conversion cost by lowering the quality of MDM and the availability of utensils were found but in usable conditions. All schools have responded positively on the regular delivery of rice & other items, which were always received on time.
16. 4.24 (a) and 4.24 (b) table reveal the problems faced by teachers in Papumpare district while implementing MDM in the schools. The conversion cost has been delivered but never on time. All 50 schools have responded negatively on the regular release of conversion cost and 50 schools have responded positively on the enhancement of conversation as it is too low. 100% of the schools responded negatively on the regularity of Monthly incentives for cooks/Helpers and 100% have responded positively on the hike in incentives for cooks/Helpers. On humanitarian ground some schools adjusted it from the school fund and later recovered it when conversation cost released to the school account. In 88% of schools, regular Regular inspection was found quite satisfactory. In 12% schools monthly or twice in a month the regular monitoring was made. Regular transportation facilities were found only in 22(44%) located nearby highway schools and 28(56%) did not have transportation facilities. 100% of the schools responded negatively on maintenance fund for the kitchen and replacement of old utensils. No school had ever received any fund, the schools were adjusting it with the conversion cost by lowering the quality of MDM and availability of utensils were found but not in usable conditions. All schools have responded positively on the regular delivery of rice & other items that were always received on time.

**Objective 5: To Study the Physical Infrastructure for Mid Day Meals in Schools**

17. Table – 4.05 (a) and 4.05 (b) depict that the physical infrastructure for Mid Day Meal in Schools of three selected districts was not satisfactory. Sound pucca kitchen shed was found only in 16% of the schools and the rest 64.66% schools did not have pucca kitchens. Although some of the schools possessed
kachha kitchens in bad working conditions but a few schools used the school ground to prepare MDM. Almost in 95.33 visited schools, the cook-cum helpers were engaged for the preparation of MDM, but the number found to be not more than 2. 4.6 of schools did not have cook-cum helpers, either the cooks were absent for low and irregular payments or MDM was prepared by hiring some women from village with the involvement of two students routine wise. 17.33% of schools served the variety in menu sometimes which included egg, seasonal vegetables, chana, peanuts, bread, biscuits and meats. In most of the schools i.e (82.66%) there was no variety only khecheri was being served. The store rooms to maintain buffer stock were found only in 24% of schools which were working in good condition and in remaining 72.66% of the schools were using unused classroom or teacher’s quarter to store food grains and that were delivered on time. All 100% of the visited schools for the purpose of cooking MDM, the availability of gas and firewood were found available. Maximum of the schools used firewood to prepare MDM. 50% of schools had regular electricity supply in their schools compound and in 50% of the remaining schools, there was no electricity supply. Availability of water supply in school compound was found in 54% of schools and in 46% of schools pipe lines were fitted but there was water supply. The schools located in village areas were collecting the water from the nearby river or other water sources but the hygiene could not be maintained. The provision of safe drinking water and multi-taping wash basin were not available so, the students came with their lunch box to carry back the MDM to their homes or with water bottles. On the other hand, dissatisfaction was found in the status of utensils in maximum 57.33% of schools. The utensils have become very old.
which need dire replacement and shortage of serving plates was quite a problem to the students. 42.66% of visited schools had sufficient number of utensils and serving plates which was replaced themselves by the school funds or donation from the local MLA LAD (Local Area Development) fund and community members. Not a single school had separate dining hall to serve MDM. In most of the schools, it was served at corridors, classrooms or school compounds.

18. Table – 4.25 (a) and 4.25 (b) reveal the physical infrastructure for MDM in schools of East Siang district. Out of 50 schools, 8 visited schools were having sound kitchen shed and the rest of i.e., 43 (86%) although possessed kitchen sheds, but they were kachha and not in proper order and need to be repaired. Many teachers were using their quarters as stores because of safety and hygiene. Almost in all the 48(96%) schools out of 50 visited schools, the cook-cum helper were engaged for the preparation of MDM, only in 2 (4%) of the visited schools did not have cook-cum helpers. In a few schools senior students were engaged to prepare MDM. Variety of menu for MDM was found only in 10 (20%) schools and in remaining 40(80%) of the schools quite limited MDM menu was found because of low conversion cost. Buffer stock was found in only 12 (24%) visited sample schools and in remaining 38 (76%) visited schools, there was no buffer stock. Teacher’s quarter, unused classrooms and self made kachha store rooms were used to store the food grains. Gas and firewood were used and found easily available to prepare MDM in all visited schools. Regarding electricity, 25 (50%) of visited sample schools had regular electricity supply in their school compound and in half of
the 25 (25%) of the remaining schools there was no absence of electricity supply. It is also observed that the availability of portable water was found only in 27 (54%) visited schools and left of the school 23 (46%) had the water supply from different sources which need to be conserved and used properly. 21 (42%) visited schools had sufficient number of utensils and most of the schools i.e 29 (58%) did not have sufficient number of utensils and they were in the need of replacement. Looking into table 4.21 (b), it can be well understood that there was no any dining hall in all the 50 (100%) visited schools. MDM was served in the open compound, unused classroom of the schools.

19. Table – 4.26 (a) and 4.26 (b) show the physical infrastructure for MDM in schools of West Siang district. Out of 50 schools, 5(10%) visited schools were having sound kitchen sheds and the rest of i.e., 45 (90%) although possessed kitchen sheds, but they were kachha and not in proper order and need to be repaired. MDM was prepared in a corner of school’s compound. Almost in all the 46(92%) schools out of 50 visited schools, the cook-cum helper were engaged for the preparation of MDM, only in 4 (8%) of the visited schools did not have cook-cum helpers in their schools. Unemployed women were hired to prepare MDM sometime. Variety of menu for MDM was found only in 7 (14%) and in remaining 42(84%) of the schools, it was quite limited in the MDM menu because of low conversion cost. Rice/ khecheri was prepared most of the time by the times. Buffer stock was found in only 9 (11%) visited sample schools and in remaining 41 (82%) visited schools there was no buffer stock. Teacher’s quarter, unused classrooms and self made kachha store rooms
were used to store the food grains. Gas and firewood were used and found easily available to prepare MDM in all visited schools. Regarding electricity, 22 (44%) of visited sample schools had regular electricity supply in their school compound and in the 28 (56%) of the remaining schools there was absence of electricity supply. It was also observed that the availability of portable water was found in 25 (50%) visited schools and half of the 23 (46%) had the water supply from different sources, in few schools pine line were connected but it was not functional. 19 (38%) visited schools had sufficient number of utensils and most of the schools 31 (62%) did not have sufficient number of utensils and they were in the need of replacement. Students came to the schools with lunch box and drinking water with them. There was not a single dining hall in all the 50 (100%) visited schools. MDM was served in the open corridor of the schools.

20. Table – 4.27 (a) and 4.27 (b) reveal the physical infrastructure for MDM in schools of Papumpare district. Out of 50 schools, 12(24%) visited schools were having sound kitchen sheds and the rest of i.e., 38 (76%) schools although possessed kitchen sheds, but they were kachha and not in proper order and need to be repaired further. In a few schools, MDM was prepareds in the unused classroom of school compound. Almost in all the 49(98%) schools, out of 50 visited schools, the cook-cum helper were engaged for the preparation of MDM, only in 1 (2%) of the visited schools did not have cook-cum helper in their schools. In some schools, peons were doing the task of preparing MDM. Variety of menu for MDM was found only in 9 (18%) schools and in remaining 41(82%) of the schools it was quite limited in the
MDM menu because of low conversion cost and khecheri was preferred by the students as rice being the stable food. Buffer stock was found in only 15 (30%) visited sample schools and in remaining 30 (60%) visited schools there was no buffer stock. Teacher’s quarter, unused classrooms and self-made kachha store rooms were used to store the food grains. Availability of gas and firewood were found to prepare MDM in all visited schools. Regarding electricity, 28 (56%) of visited sample schools had regular electricity supply in their school compound and in the 22 (44%) of the remaining schools there was no electricity supply. It was also observed that the availability of portable water was found in 29 (58%) visited schools and 21 (42%) schools had no water supply, in few schools pipeline were connected but was not functional. 24 (48%) visited schools had sufficient number of utensils and most of the schools 26 (52%) did not have sufficient number of utensils and they were in the need of replacement. Students come to the schools with lunch box and drinking water bottles. There was not a single dining hall in all the 50 (100%) visited schools. MDM was served in the school compound almost all the times.

**Objective 6: To Study the Participation of SMCs and Parents in MDM Programme**

21. The above table – 4.06 reveals the complete result of Participation of SMCs and Parents in MDM Programme in three districts of Arunachal Pradesh. Out of 150 selected schools, it was found that 24(16%) of SMCs and Parents participation were quite satisfactory, 68(45.33%) were satisfactory, 34(22.66%) were good and 24(48%) were average, this shows that
68(45.33%) parents and SMC members were quite satisfactory with MDM programme running in the schools of three selected districts. SMCs and community members were actively participating in many areas of MDM, some of them were (i) in the area of cooking, in absence of cook cum helpers they voluntarily turned up and prepared MDM for children and many times they donated seasonal vegetables and other items (ii) in the area of managing firewood, many times they offered their fields to collect firewood or brought firewood to the schools (iii) in the area of utensils, they donated saucepan, serving plates and spoons to the schools when they were in the dire need of replacement (iv) in the area of inspection, they did not pay regular visits to the schools to check the regularity of MDM. They used to taste the food by its colour, quantity and hygiene maintained while cooking and were giving feedback to the teacher- in charge for its improvement (v) in the area of conversation costs, they were playing the role of lender when school were in need of money to run the MDM programme and there was a delay on the release of conversion cost. In the special occasion like 15th August, 26th January, Teacher’s day, Schools weeks etc, they distributed special food and sweets to the schools which is highly appreciated by teachers and students. They also actively participated in the environment drive of the schools which led to increase in the environment of the schools every year, in maintaining gender equality by creating awareness among the illiterate parents about the importance of equality and girl’s education, in maintaining regular attendance of the classes by educating the illiterate parents about the ill effects of illiteracy. So, it is evident that the SMCs and parents were quite active in
solving all the problems and creating conducive environment for smooth functioning of MDM programme in their respective schools.

22. Table - 4.28 indicates that the participation of SMC and Parents in MDM programme in East Siang District of Arunachal Pradesh. Out of 50 selected schools, it was found that 8(16%) of SMCs and Parents participation were quite satisfactory, 24(48%) were satisfactory, 10(20%) were good and 8(16%) were average. From the table - 27, we can say that overall majority (48%) SMC and Parents were satisfactory and concerned about Mid-Day-Meal provided to children at the schools. The participation of SMCs and Parents in MDM programme in East Siang District is highest than in comparison to two other districts. Teachers and students opined that most of the SMCs and community members encouraged the schools and involved themselves in all the tasks relating to cooking, distributing, regularity, inspection, managing firewood, utensils, availability of water, managing cooks cum helpers, electrification, maintaining hygiene while preparing and eating MDM, school - parents meeting, maintaining buffer stock etc for the smooth functioning of MDM programme in the schools.

23. Table - 4.29 reveals the participation of SMC and Parents in MDM programme in West Siang District of Arunachal Pradesh. Out of 50 selected schools, it is found that 6(12%) of SMCs and Parents participation were quite satisfactory, 22(44%) were satisfactory, 12(24%) were good and 10(20%) were average. From the table – 4.29, we can say that (44%) SMC and Parents were satisfied and concerned about the Mid-Day-Meal provided to children at
the schools. Teachers and students opined that most of the SMCs and community members encouraged the schools and involved themselves in all the tasks relating to cooking, distributing, regularity, inspection, managing firewood, utensils, availability of water, managing cooks cum helpers, electrification, maintaining hygiene while preparing and eating MDM, school - parents meeting, maintaining buffer stock etc for the smooth functioning of MDM programme in the schools.

24. Table - 4.30 shows the participation of SMC and Parents in MDM programme of Papumpare District of Arunachal Pradesh. Out of 50 selected schools, it was found that 10(20%) of SMCs and Parents participation were quite satisfactory, 22(44%) were satisfactory, 12(24%) were good and 6(12%) were average. From the table – 4.30, we can also say that (44%) SMC and Parents were satisfied and concerned about the Mid-Day-Meal provided to children at the schools. Teachers and students opined that most of the SMCs and community members encouraged the schools and involved themselves in all the tasks relating to cooking, distributing, regularity, inspection, managing firewood, utensils, availability of water, managing cooks cum helpers, electrification, maintaining hygiene while preparing and eating MDM, school - parents meeting, maintaining buffer stock etc for the smooth functioning of MDM programme in the schools.

Objective – 7: To study the attitude of teachers and community members towards MDM scheme

25. From the above table 4.31, it is revealed that the attitude Mean scores of teachers came out to be 41.73 and standard deviation was found to be 6.1. The
computed attitude mean scores (41.73) is greater than the mean score (30) of attitude scale. It means that teachers had favorable attitude towards MDM programme.

26. The table - 4.34 shows that the computed t-value came out to be 1.46 which is less than the criterion t-value (1.96) at .05 level of significance for 598 df. Therefore the computed t-value (1.46) has been considered not significant and the formulated hypothesis “There is no significant difference in the attitude of male and female elementary school teachers towards Mid Day Meal scheme in the three selected districts of Arunachal Pradesh.” gets accepted. This means that in true sense male and female teachers did not differ significantly in their attitude towards Mid Day Meal scheme.

27. From the above table - 4.35, it is revealed that the attitude Mean scores of community members came out to be 40.7 and SD was found to be 6.2. The computed attitude mean scores (40.7) is greater than the mean scores (30) of the attitude scale. So it is to be generalized that more than 50% of community members had favorable attitude towards MDM in the three districts like East Siang, West Siang and Papumpare of Arunachal Pradesh.

28. The table 4.38 reveals that the computed t-value came out to be 0.3 which is less than the criterion t-value (1.96) at 0.5 level of confidence for 598 df. Therefore the computed t-value (0.3) has been considered not significant and the formulated hypothesis “There is no significant difference in the attitude of male and female Community members towards Mid Day Meal scheme in the
three selected districts of Arunachal Pradesh.” got accepted. This means truly that male and female community members differ significantly in their attitude towards Mid Day Meal scheme.

29. The table 4.41: shows that the computed t-value came out to be 0.27 which is less than the computed t-value (1.96) at .05 level of confidence for 598 df. Therefore the computed t-value (0.27) has been considered not significant and the formulated hypothesis “There is no significant difference in the attitude of Non-Tribal and Tribal community members towards Mid Day Meal scheme in the three selected districts of Arunachal Pradesh.” got accepted. This means that non-tribal and tribal community members did not differ significantly in their attitude towards Mid Day Meal scheme in the three selected districts of Arunachal Pradesh namely East Siang, West Siang and Papumpare.

5.8 Discussion of the Result

The Mid Day Meal programme is being implemented in Arunachal Pradesh from 1995 onwards. The main focus of this programme is to provide free meal to the children studying in primary and upper primary schools to meet the goal of universalization of elementary education. On the basis of above finding and discussion it can be concluded that after the introduction of MDM the enrolment and attendance has increased which can be seen in the figure 1, 2 and 3. The dropout rate has slow down and retention power is increasing. The programme encouraged the poor families to send their children to the schools as most of the children enrolled in the government school are poor and lives in below poverty line. The coverage of this programme was very wide. Similar result of increased in enrolment was found in the
The success of the programme lies in the regularity of serving meal on daily basis but dissatisfaction was found in the regularity of the programme. From the figure 4, 5 and 6 it can be seen that most of the school served MDM alternatively and few school were serving MDM sometime. The main motive of the programme was to enhance the attention span of the students by fulfilling their hunger. with hungry stomach students will not be able to pay full focus on their studies. So, by cutting the regularity of the meal it is also reducing the regular intake of protein and other vitamins making them malnutrition. So, supervising the regularity of programme is the need of the hour for the fruit fullness of the programme. Similar studies on regularity of MDM was also conducted by Chugh (2008), Josephine & Raju (2008), Srinivas (2008), Raju (2009), Kaushal (2009), Narula (2009), Jayaraman et al.(2009), Deodhar et al.(2010), Singh (2010), Chauhan (2011), Garg (2012), Paul and Mondal (2012), Uma (2013), Chaudhury and Mondal (2015), Sarkar and Bhattacharyya (2015), verma (2015), Giri et al. (2016), Acham et al. (2012), Roofe (2010) and Bonds (2012) and the result revealed that in few of the studies it was found that although the taste of the food was not good and academic relationship with MDM is absence but in all the schools MDM was served regularly.

From the present research study, it is interesting to know that in most of the schools there were no varieties of menus provided to the students. The quality of food grains supplied was found to be quite satisfactory. The students were satisfied with
the quantity and taste of food provided to them but it was always in the form of khecheri, as khecheri alone not satisfying the nutritious needs of the students. The parents and students opined to provide fruits and other items in their menu. The teachers in charge were found dissatisfied with the amount of conversion cost which is too less and its irregularity and delay in discharge, it was the only reason why they could not provide hot and nutritious food to the children on daily basis. It is also significant to note that teacher in charge should be given basic knowledge, training and orientation programme to manage MDM programme and the trained teachers should be appointed as MDM in charge. The investigator also found that similar studies were also conducted by, Roofe (2010), Schindler (2010), Acham et al. (2012), Bonds (2012), Page (2015), verma (2015), Giri et al. (2016). The result shows that there is a close relationship between the food provided in the schools and academic performance of the students. So, the poor nutritious value in the food will result in the poor performance of the schools.

It is the matter of dissatisfaction that in spite of being the largest food programme running in the world, there still exists lots of problem in implementing this programme in the schools shown in the table 4.04 (a) and (b) such as no timely dispatch of conversion cost, no timely release of honorarian of cook cum helpers, no regular inspection by the officials, no transportation facilities, no regular supply of water, no maintenance fund for kitchen. No fund for replacement of old utensils etc. The main root cause was found from the study that the fund and food grains required to run the programme were released in a very limited way. The teacher in charge had to run the programme in a very economical way by cutting the nutritious value from their diet for the continuity of the programme. If possible, conversion cost and monthly incentive paid to the cooks should be increased which will pay the way for

After investigating the problems in implementing Mid Day Meal programme in Arunachal Pradesh, the investigator investigated the physical infrastructure for Mid Day Meal programme and the result in the table 4.05 (a) and (b) shows that the programme was running in all the schools but the physical infrastructure were in very pathetic conditions which need dire attention and replacement. Pucca kitchen shed, availability of store room, utensils, variety of menu and dining hall found only in few schools. In many schools there was no regular supply of water and electricity. Gas/firewood and appointment of cooks cum helpers were found available in all the schools. The teachers in charge had to run the programme in a very economical way with limited irregular release of conversion cost. However teachers in charge should implement new concept for better functioning of the programme such as rain water harvesting in the area of no regular water supply, kitchen garden to add seasonal vegetables in khecheri for nutritious value in meal, fruit garden to provide seasonal fruits to the children which is the demand of all parents and students from all visited schools, record keeping display on school wall should be maintained properly for crystal clear of the programme. Similar type of studies on Mid Day Meal and food related were conducted by Dreze and Goyal (2003), Deodhar et al. (2007), Roofe (2010), Schindler (2010), Acham et al. (2012), Bonds (2012), Page (2015), verma
(2015), Giri et al. (2016) etc and they have also suggested many new ways to deal with the infrastructure related issues for better functioning of the programme.

The computed result of the table – 4.06 concerning to the participation of SMCs and Parents in Mid Day Meal programme, shows the positive result. Maximum of SMCs and parents were found satisfactory and quite active in giving all types of support in solving all problems and creating conducive environment for smooth functioning of Mid Day Meal programme in their respective schools. Most of the SMCs and parents felt that Mid Day Meal has positive impact on enrolment, attendance, retention, nutritious status, social equity, imbibing good habits and maintaining discipline of the students. It is also generating employment to the unemployed local people. They should be the eye opener of this programme by actively participating to know the present status of how the programme is running in their schools and reporting the same to the government if any mismatch and corruption practice are found. Similar type of results and suggestions on the studies of participation of SMCs, parents and community members on Mid Day Meal programme were also done by Chugh (2008), Mallik (2008), Narula (2008), Srinivas (2008), Narula (2009), Roofe (2010), Nambiar (2013), verma (2015), Bhattacharyya (2015).

On the other hand, the attitude towards Mid Day Meal programme running in Arunachal Pradesh shows both positive and negative feelings of teachers and community members. 60% of the parents were happy with the food provided by the schools as they cannot afford to provide two times of nutritious food whereas rest of the parents felt that the food provided by the schools is of low quality, unhygienic preparation and watery. The schools were unable to provide the nutritious food. Majority of the parents felt that the programme should be continued and the rest of
them felt that it should provide once or twice in a week with fruits and nutritious food. Majority of teachers felt that MDM programme has positive impact on enrolment. Attendance and retention of the students whereas rest of the teachers felt that the programme does not have positive influence on enrolment, attendance and retention rather it is cutting the teaching time of the teachers owing to the introduction of MDM. Teachers used to collect the food grains, supervise the cooking and distribution and maintain discipline in schools. Most of the teachers felt that MDM programme has positive influence on adding nutritious value of the students and it should be prepared in school premises to check the hygiene maintained while cooking, whereas rest of the teachers felt that “Ready to Eat” food should be served as it will reduce the managerial work load of the teachers. They also felt that preparing food in the school premises creates an atmosphere of picnic among the students and attention get diverted from the study and the leftover food and mess after serving creates an unhealthy smell around the school premises if it is not clean properly. Ready to eat food can be store for 2 – 3 days and the problem of daily cooking can be solved. So, it is found that mixed feeling are coming from teachers and parents towards MDM programme.

The present piece of research work was conducted on MDM programme is a blessing for rural areas schools where children below poverty line studying. The structure of the programme is well defined. The roles, responsibilities and functioning of all the personnel who were directly and indirectly engaged in the programme were also defined clearly for the smooth functioning of the programme. The teachers in-charge were found to be the most active person in running the programme. Despite of all the problems regarding cooking costs, pucca kitchens, store rooms, dining halls, utensils, water and electricity, transportations, cooks,
variety of menu, quality, quantity, inspection, attitude and participation of SMCs, community members and parents etc, teachers in-charge could not stop giving Mid Day Meal to their students. Owing to the implementation of MDM programme, students were more relaxed and energetic to pay full attention in the classes as their hunger was satisfied. The programme has increased the enrolment, attendance, retention, social equity, employment, discipline etc. it has also made students socially and emotionally healthy, early school enrolment is also there thereby leading to all round development of the students. Fake enrolment provided by teachers in order to get large quantity of food grains and extra cooking cost should be avoided, testing of food first by the head and other teachers and then served to the students should be started, supervising system must be effective, new concept should be implemented for better functioning of the programme such as rain water harvesting to solve water scarcity, kitchen gardens to add seasonal vegetable in khecheri for nutritious value in meal, fruit garden to provide seasonal fruits to the children, use of solar energy for electricity, record keeping display on school wall of daily menu, officers visited, food grain and cooking cost received and used should be maintained properly for better effectiveness of the programme.

5.9 Conclusion

On the basis of above finding and discussion it can be concluded that after the introduction of MDM the enrolment and attendance has increased. The dropout rate has slow down and retention power is increasing. The coverage of this programme was very wide. The success of the programme lies in the regularity of serving meal on daily basis but dissatisfaction was found in the regularity of the programme. So, supervising the regularity of programme is the need of the hour for the fruit fullness
of the programme. It is interesting to know that in most of the schools there were no varieties of menus provided to the students. It was found that most of the schools always served MDM in the form of khecheri. There still exists lots of problems in implementing this programme in the schools, such as no timely dispatch of conversion cost, no timely release of honorarium of cook cum helpers, no regular inspection by the officials, no transportation facilities, no regular supply of water, no maintenance fund for kitchen. No fund for replacement of old utensils etc. It is desired that, conversion cost and monthly incentive paid to the cooks should be increased which will pay the way for the better functioning of the programme.

The physical infrastructures were in very pathetic conditions which need dire attention and replacement. Attitude towards Mid Day Meal programme running in Arunachal Pradesh shows both positive and negative feelings of teachers and community members. 60% of the parents were happy with the food provided by the schools whereas rest of the parents felt that the food provided by the schools is of low quality, unhygienic preparation and watery. Majority of teachers felt that MDM programme has positive impact on students whereas rest of the teachers felt that the programme is cutting the teaching time of the teachers owing to the introduction of MDM.

The teachers in-charge were found to be the most active person in running the programme. It was also found that the programme has increased the enrolment, attendance, retention, social equity, employment, discipline, early school enrolment etc. It was also observed that fake enrolment provided by teachers in order to get large quantity of food grains and extra cooking cost were prevailing which should be avoided and testing of food first by the head and other teachers and then served to the students should be encouraged. Supervising system must be effective, new
concept should be implemented for better functioning of the programme such as rain water harvesting to solve water scarcity, kitchen gardens to add seasonal vegetable in khecheri for nutritious value in meal, fruit garden to provide seasonal fruits to the children, use of solar energy for electricity, record keeping display on school wall of daily menu, officers visited, food grain and cooking cost received and used should be maintained properly for better effectiveness of the programme.

5.10 Educational Implications of the Study

This piece of research work has various educational implications, as the study is about the Mid Day Meal programme in Arunachal Pradesh which covered the elementary education. Elementary Education forms the formation for gaining basic knowledge. Some of the important educational implications of this study have been put as under:

1. The present study is a great stimulation in gearing up the universalisation of elementary education as the study covered Mid Day Meal scheme at the elementary education in Arunachal Pradesh.

2. It has been observed that there is enthusiasm on the part of children for coming to school for learning after the introduction of MDM, so this scheme helps to make schools more attractive for children and thus improved enrolment and attendance ratio.

3. The present study is an eye opener for the educational planners, administrators, teachers and community members and policy makers in improving the Mid Day Meal Scheme for ensuring the quality of education at the elementary level.

4. The present study creates awareness about the status of Mid Day Meal programme among the educational functionaries.
5. The present study helps to create awareness to teachers, community members and students which leads to change the mindset of parents and community members about the importance of nutritional aspects of the children while learning.

6. The study revealed that the quality of student’s achievement of learners depend upon the quality of good health. The quality of food served in the schools can be improved by the regular monitoring of the programme.

7. The present study also revealed that Mid Day Meal Scheme helped in reducing classroom hunger, enhancing attendance, retention, social equity, employment opportunities and imbibing good habits, therefore the Mid Day Meal programme functionaries need to pay attention on the regularity and quality of MDM in schools.

8. The present study shows that there is increased socialization among children by sitting and eating food together and breaks social barriers among the students. This also brings positive social change among the students who are coming from different background.

9. The study is also very informative to the teachers and MDM functionaries that it reduces early leaving of children from school due to hunger, which in turn creates low attendance, poor learning environment faced by the teachers in the schools. Therefore, it is pertinent to know this matter, so that MDM scheme should be seriously taken up by both the school authority as well as by the Government.

5.11 Suggestions for Further Studies

1. The present study was covered East Siang, West Siang and Papumpare of Arunachal Pradesh to know the Mid Day Meal programme, such studies can be also conducted on some other districts of Arunachal Pradesh.
2. The present study was concerned on Mid Day Meal programme in Arunachal Pradesh; A Critical study and this type of similar study on Mid Day Meal programme in Arunachal Pradesh with special reference to growth in enrolment before and after introduction of MDM programme can be conducted.

3. It is also suggested that such study may also be carried on comparative study of MDM programme of urban and MDM programme of rural areas.

4. The study may also be conducted further on the influence of community members on effective implementation of MDM programme in rural areas.

5. The study may also be taken up on the scientific analysis of the menu provide by MDM programme by collecting the data of an academic year.

6. The study can also be proposed on the impact of MDM programme on the quality development of elementary education.

7. The researcher suggests that the study may also be conducted on the effectiveness of MDM programme on the attendance, academic performance and social equity among the students.

8. It is also suggested that such study may also be carried out by taking up the problems of MDM programme in Arunachal Pradesh in relation to regularity, administration and supervision.

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