CHAPTER-V

SUMMARY, CONCLUSIONS, EDUCATIONAL IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

5.1 SUMMARY

India is a developing democratic country. In a democratic country the education of every individual is important and also in turn the efforts from every individual are needed for the progress and development of the country. Elementary education is the base upon which the super structure of education rests. Many initiatives during British rule and National movements for compulsory primary education were undertaken in India before independence. After independence we have seen a linear expansion of the elementary education system through allocation of additional resources. The plan allocations for elementary education have increased steadily, though still not adequate to fulfill the goal of cent per cent literacy. Since independence there have been higher levels of spending by the Centre and State governments to provide quality, free and compulsory elementary education to all children in the age group of 6-14 years.

Consequent to the National Policy on Education (NPE-1986) and Programme of Action (POA-1992) a number of centrally sponsored schemes were introduced to cater to the specific needs of the elementary education sector. These included Operation Blackboard (1987) to improve school environment, enhance retention and learning achievement of children by providing minimum essential facilities in all elementary schools, Minimum Levels of learning (1991) to improve learning achievements of children, District Primary Education Programme (1994) to increase enrolment and reduce drop-outs in those districts where female literacy rate was on the lower side as per 1991 Census and nationwide Mid Day Meal Programme.
(1995). Now Sarva Shiksha Abhiyan (2002-2003) has been introduced to provide all kinds of necessary facilities including quality education at elementary level.

The children in our schools represent a vital segment of our population. They are our valuable human resources and will contribute to the bulk of our workforce in 21st century. Their health, nutritional status and education attainments will to a considerable extent, determine the quality of our nation in the years to come. Many of these children still carry the scars of malnutrition and diseases of their earliest years and many of them also suffer from continuing malnutrition. Hence due to these problems of malnutrition on UEE, a Centrally sponsored Scheme ‘National Programme of Nutritional Support to Primary Education (Commonly known as the Mid Day Meal Scheme) was launched on 15th August, 1995 with two fold objectives: (i) To enhance the nutritional status of school age children and (ii) hasten the march to universalization of elementary education by increasing enrolment, retention and attendance.

The Mid Day Meal Scheme is a noble programme satisfying the hunger of millions of children per day throughout the country. The Mid Day Meal Scheme is one of the major initiatives started for achieving the goals of universalization of elementary education in India. The Scheme has the potential to boost or adversely affect the ongoing teaching-learning processes depending on its way of implementation. The evaluation of Mid Day Meal Scheme is very important in terms of its implementation and the objectives for which it is launched. In this study an attempt has been made by the researcher to know the strengths and weaknesses of the National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh along with its present status of implementation. The success of any programme depends upon its proper
implementation and hence evaluation of such programmes is needed in order to know the ground realities. Such types of studies have hardly been taken up by researchers in the State and will be very helpful in evolving a holistic picture of the Mid Day Meal Scheme at the State level, it was thought worthwhile to undertake the problem for research:

‘NATIONAL PROGRAMME OF NUTRITIONAL SUPPORT TO PRIMARY EDUCATION (MID DAY MEAL SCHEME) IN HIMACHAL PRADESH: AN EVALUATIVE STUDY.’

OBJECTIVES OF THE STUDY

The present study was undertaken with the focus on the following objectives:

1. To study the development of National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh.
2. To study the implementation of National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh.
3. To study effectiveness of National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in terms of achievement of its objectives, viz.
   i. Enrolment of the students
   ii. Retention of the students
   iii. Attendance of the students
   iv. Improvement of nutritional status of students of primary school stage.
4. To study teachers’ perceptions towards National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh.
5. To study the attitude of teachers towards National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh.

6. To study parents’ perceptions towards National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh.

7. To study students’ reactions towards National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh.

8. To identify various problems obstructing the achievement of objectives of Mid Day Meal Scheme in Himachal Pradesh.

9. To provide suggestions for making the Mid Day Meal Scheme more effective.

**DELIMITATIONS OF THE STUDY**

The present study was delimited to the following aspects:

1. Out of twelve districts of Himachal Pradesh, four districts namely: Bilaspur, Mandi, Kangra and Lahaul–Spiti were selected for the study.

2. The study was further restricted to the government primary schools. Government aided primary schools and EGS/AIE Centers were excluded from the study.

**OPERATIONAL DEFINITIONS OF TERMS USED**

Following terms have been used in the study:

1. National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme)

   It is the revised Central Government Scheme to provide hot cooked nutritious meal to every student studying in classes I-V in every
Government and Government assisted primary schools having a minimum content of 450 calories and 12 grams of protein each day of school for a minimum of 200 days in recess or half time.

2. Evaluative Study

Evaluative study refers to qualitative research approach with holistic perspective to have a comprehensive view of the complex issue through the process of assigning units of measurement to phenomenon (Mid Day Meal Scheme) in order to characterize their worth or value, usually with reference to some social, cultural or scientific standard (attainment of universal education with quality). In the present study evaluation of National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) has been considered in terms of:

1. Views and perceptions of teachers working in government primary schools, students studying in these schools and parents who are providing education to their children in these schools with regard to certain issues.

2. Attitude of primary school teachers towards Mid Day Meal Scheme.

3. Implementation of Mid Day Meal Scheme in sampled schools along with achievement of its objectives namely:
   - Enrolment of students
   - Retention of students
   - Attendance of students
   - Improvement of nutritional status of students of primary school stage.

METHODODOLOGY

Descriptive survey method of research was used in the present study.
TOOL USED

Following tools were developed in the present study.

Programme Parameter Tools

1. Attitude scale for primary school teachers measuring attitude towards Mid Day Meal Scheme.
2. Questionnaire to study the teachers’ perceptions towards Mid Day Meal Scheme.
3. Questionnaire to study the students’ reactions towards Mid Day Meal Scheme.
4. Questionnaire to study the parents’ perceptions towards Mid Day Meal Scheme.
5. Observation schedule regarding implementation of Mid Day Meal Scheme in government primary schools of Himachal Pradesh.

Impact Parameter Tools

1. **Schedule-I:** for obtaining gender-wise data from classes I-V pertaining to enrolment of students from session 1999-2000 to 2009-10.
2. **Schedule-II:** for obtaining gender-wise data from classes I-V pertaining to number of drop-outs from session 1999-2000 to 2009-10.
3. **Schedule-III:** for obtaining data pertaining to attendance of class III students for the first quarter of session 2009-10.
4. **Schedule-IV:** for obtaining data pertaining to attendance of class V students for the first quarter of session 2009-10.
5. **Schedule-V:** for obtaining class-wise list of under-weight and under-nutrient students in relation to their gender and the social category to which they belong.

UNIVERSE AND SAMPLING
The study was completed in two phases by drawing independent samples from government primary schools of Himachal Pradesh.

**Phase I: Development of Tools**

An initial sample of 150 primary school teachers was drawn for construction of attitude scale. Further a sample of 75 primary school teachers was drawn to establish reliability of the attitude scale.

**Phase II: Sampling in the Phase II included**

1. **Government Primary Schools**

For studying the implementation of National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) a total sample of 200 government primary schools was selected in all by using multistage random sampling technique.

2. **Primary School Teachers**

All primary school teachers who were willing to respond were selected for the purpose of studying their perceptions and attitude towards Mid Day Meal Scheme.

3. **Primary School Students**

In order to study reactions of students towards Mid Day Meal Scheme a sample of 1380 (Male 686 and Female 694) primary schools students studying in the sampled schools was drawn by using purposive sampling technique.

4. **Parents**

For selection of parents in order to explore their perceptions regarding Mid Day Meal Scheme, the method of quota sampling was employed and a sample of 500(Male 150 and Female 350) parents was selected.
COLLECTION OF DATA

The investigator collected the necessary data from government primary schools of Himachal Pradesh identified for survey along with perceptions of teachers, their attitude, perceptions of parents and reactions of students.

ANALYSIS OF DATA

The data collected through various tools were organized as under:

1. Documentary analysis of development of National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh.

2. The views and perceptions of primary school teachers, students and parents were classified and tabulated issue wise.

3. The attitude of primary school teachers towards Mid Day Meal Scheme was tabulated on interval scale and gender, teaching experience and social category wise differences were worked out.

4. Observations made through observation schedule were organized under five broad categories related to different aspects of Mid Day Meal Scheme.

5. Students’ enrolment and number of drop-outs were classified on the basis of gender and tabulated year wise from session 1999-2000 to 2009-2010.

6. The month wise attendance of students of class III and V was tabulated on interval scale (i.e. for the first quarter of the session 2009-2010 i.e. April, May and June.)

7. Under-weight and under-nutrient students was classified and tabulated with respect to their gender, class and social category.
STATISTICAL TREATMENT OF DATA

The information collected through teachers’ questionnaire, students’ questionnaire, parents’ questionnaire and observation schedule was put to percentage analysis to give meaning to data. The percentage means that the results are calculated and discussed from per 100 in order to understand the results in a better manner. In case of data pertaining to attendance, enrolment, drop-outs and nutritional status percentage analysis was the sole criteria for analysis and interpretation.

In order to study the significance of differences (gender-wise, experience-wise and social category-wise) in the attitude scores of teachers with regard to Mid Day Meal Scheme, the means and SDs were computed and t-test was applied i.e. to verify hypotheses formulated in the study.

5.2 CONCLUSIONS

In the light of scope of present study, delimited to four districts of Himachal Pradesh, following conclusions were drawn.

5.2.1 Development of National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh

Himachal, meaning the land of snow, located in the lap of the western Himalayas. It is one of the most beautiful States of Indian Union. The National Programme of Nutritional Support to Primary Education popularly called Mid Day Meal Scheme was launched on 15th August, 1995. This Scheme was implemented initially in 13 CD Blocks, then, it was extended to 33 CD Blocks and finally, in all 72 CD Blocks of the State. Due to financial constraints, uncooked food grains (rice) @ 3 kg per month per student were being distributed to the children of classes I-V having attendance 80% or
more for ten academic months of the year, in all government/government aided primary schools and EGS Centers under SSA of the entire State, till May, 2003. Thereafter, in compliance to the orders passed by Hon’ble Supreme Court of India in Civil Writ Petition 196 of 2001, titled as People’s Union for Civil Liberties versus Union of India and Others, Government of Himachal Pradesh decided to provide a hot cooked, nutritious, protein rich mid day meal supplemented with micro-nutrients and iodized salt to all students of primary classes in all government/government aided primary schools as well as EGS Centers of the State on all the school days of the year, in a phased manner. The schools of the scheduled (tribal) region of the State were covered in the first phase, w.e.f. 22nd May, 2003 and in the second phase all the remaining government/government aided primary schools as well as EGS Centers of the non-tribal region of the State were covered w.e.f. 1st September, 2004. The Mid Day Meal Scheme was revised by the Government of Himachal Pradesh in the year 2006 vide its letter number EDN-H(EE)(4)-31/2004-vol-II, dated 31st August, 2006 regarding enhancement of conversion cost per child per school day from Rs. 1.76 to Rs. 2.50, the rates of honorarium allowed to the cooks/helpers engaged, the scale of ingredients permitted and the norms in respect of tentative menu.

With effect from the year 2008-09, the State has proposed to extend the Mid Day Meal Scheme to all 4262 government/government aided (middle units) of the Sr. Sec./High/Middle schools of the entire State to cover the targeted 350874 students of classes VI-VIII on all 242 school days of the year. Accordingly Himachal Pradesh Government extended this Scheme to upper primary stage from 1st July, 2008 in all government/government aided schools all over the State. Under cooked Mid Day Meal Scheme the State had covered all the Schools (10,821 in the primary stage and 4,355 schools in the upper primary stage).
5.2.2 Researcher’s Observations regarding Implementation of Mid Day Meal Scheme in Government Primary Schools of Himachal Pradesh

Part-I

Basic Facilities Available in the Schools for Mid Day Meal Scheme

(a) Provision of separate kitchen-cum-store

In all the sampled schools there was no provision of kitchen-cum-store separately. One classroom was usually used as a kitchen-cum-store. In the absence of a separate kitchen, cooking distracts students and hampers the learning process. Teaching-learning processes of the nearby classes get disturbed due to the use of one of the classrooms as a kitchen.

(b) Storage of ingredients

There was temporary arrangement for storage of food ingredients in these schools. In most of the schools the food grains and other ingredients were stored in the jute bags.

(c) Adequate clean water supply

In 194 government primary schools (97%) there was adequate clean water supply available in the schools for drinking purposes and for washing and cleaning. The main source of water in the schools was tap and in some schools handpump was also used for the supply of fresh water. The distance from kitchen to water source varies from school to school. In 3% of the sampled government primary schools there was acute scarcity of water in summer season and there was no help received in this direction from the authorities mentioned in the Scheme.
(d) **L.P.G. Connection**

In all sampled schools L.P.G. connection was available for cooking purpose and gas based fuel is used for cooking mid day meals. Incase of non availability of L.P.G. cylinders, fire wood was used for cooking purpose as a temporary arrangement.

(e) **Utensils for cooking and serving purposes**

There was proper provision of utensils for cooking and serving purposes in all the schools visited by the investigator.

**Cleanliness of Cooking Utensils and Kitchen**

(a) **Appropriate cleanliness of cooking utensils**

In all schools cooking utensils were generally found to be neat and clean in order to ensure hygienic preparation of mid day meals. Cooking utensils were properly cleaned by the helpers/cooks after serving mid day meal and then dried up in the sunlight. Proper attention is paid towards hygienic preparation of mid day meals and the role of school teachers in this context is praiseworthy.

(b) **Proper cleanliness of kitchen and serving place**

Separate building for kitchen outside classrooms is not available in the schools and one of the vacant classrooms has been partly converted into kitchen. The kitchens have very limited facilities yet the schools somehow manage it. The workable kitchens in the schools were found to be clean. All possible efforts are made by the teachers to keep the school campus clean.

(c) **Enough water available for cleaning the utensils**

There was enough water available in the schools for the purpose of cleaning the utensils and the schools have their own water tank for water storage.
Quality of the Distributed Mid Day Meal

(a) Children take mid day meal with interest

An average quality of mid day meal is provided to the children daily and they take mid day meal with interest.

(b) & (c) Quality of mid day meal being provided to the students

All ingredients used for cooking (i.e. food grains, pulses, vegetables, cooking oil, condiments etc.) were free from adulteration and pest infestation and were used by the cooks after proper cleaning and washing. It is ensured by the school teachers that the cooked mid day meal is nutritious and balance diet. The mid day meal served under National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) was rice based depending on the choice of students of the area.

Precautionary Measures during Mid Day Meal Distribution and Preparation

(a) & (d) Washing of hands with soap by the students before and after taking mid day meal

In 42 schools (21%) soap facility was made available for washing hands and students wash their hands properly with soap before taking mid day meal but after eating they wash their hands with water only without using soap. In rest of the schools (79%) there was no provision of soap and students wash their hands with water before and after taking mid day meal.

(b) Facility provided to the students for cleaning individual utensils

In all schools water and soap for washing purpose was made available to students for cleaning their individual utensils.
(c) Facilities concerning sitting arrangement, distribution of meal and supervision

There was proper sitting and serving arrangement for children in all government primary schools visited by the researcher. One or two teachers were always present at the time of meal distribution to the students. The meal was properly inspected by the teachers before being served to the children.

(d) Cook is able to handle the L.P.G. chulaha properly

The cooks working in the government primary schools of Himachal Pradesh for cooking mid day meals were able to handle the L.P.G. chulaha properly.

Researcher’s Perceptions towards Implementation of Mid Day Meal Scheme in Government Primary Schools of Himachal Pradesh

(1) Distance of kitchen from the classrooms

Out of 200, 180 i.e. (90%) government primary schools have inappropriate distance of kitchen from classrooms. Only in 20 schools (10%) the kitchen was at an appropriate distance from the classrooms and hence there was no interference with teaching-learning process.

(3) & (2) Quality and quantity of mid day meal

In terms of taste the quality of meal was found to be edible and of average quality. The quantity of meal served to the children under Mid Day Meal Scheme was sufficient to fill their hunger.

(4) Quality of raw materials

In sampled government primary schools the quality of raw materials were found to be average and food grains, pulses, cooking oil and condiments
used for cooking mid day meals were free from adulteration and pest infestation.

(5) Serving time
Mid day meal was served to the children in the recess or half time depending on the time table of the school and its serving time in most of the schools was between 12:00 am to 1:00 pm.

(6) Presence of teachers at the time of serving mid day meal
In all government primary schools teachers supervised the mid day meal preparation and one or two teachers were always present at the time of distribution of mid day meals to the students.

(7) Littering and wastage of meal
The wastage and littering of mid day meals by the children was very less. Children left the meals rarely. At the time when the researcher visited these selected government primary schools there was no food which was lying here and there in the sampled schools and polluting the environment.

(8) Meal served to the children
Mid day meal was served with love to the children by the helpers and cooks.

(9) Daily preparation of mid day meal
Mid day meal is prepared daily on each working day and served to the children regularly in government primary schools of Himachal Pradesh.

(10) Discrimination with any child
No case of discrimination was noticed with any child of any section of society on the basis of caste, gender and religion in these selected government primary schools at the time of distribution of mid day meals.
(11) **Arrangement of drinking water**
There was proper arrangement of drinking water in these government primary schools for children and maximum children have their own glasses for drinking water.

(12) **Maintaining daily records of Mid Day Meal Scheme**
The records of Mid Day Meal Scheme were maintained by the teachers daily in the school.

(13) **Interest on the part of teachers**
 Mostly there was little interest noticed on the part of the teachers of these government primary schools for the implementation of Mid Day Meal Scheme.

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**Part-II**

**Other Important Observations in the Selected Government Primary Schools concerning Mid Day Meal Scheme**

- The government primary schools in Himachal Pradesh are implementing National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) as per the guidelines received from State government.

- In all schools, there were no safety provisions in case of any accident like fire, leakage of gas cylinders, etc.

- A hot cooked nutritious mid day meal is provided to every child in the recess time regularly on each working day.

- The quantity of food served to the children is sufficient to satisfy their hunger.

- Mid Day Meal Scheme consumed a part of the teaching time of teachers as they have to arrange each and every thing for the smooth
implementation of the Scheme and have to maintain the daily records of the Scheme regularly.

- After discussions with cooks and staff members of government primary schools it is suggested that there is need to increase the funds for strengthening the Mid Day Meal Scheme.

- The honorarium payable to cooks and other helpers is very less and it is just exploitation of the workers and cooks due to unemployment.

- Maximum cooks appointed in these government primary schools for preparation of mid day meals were untrained.

- The delay in release of funds has caused several problems to the schools, as these agencies have less financial resources. Hence, funds may be released without causing delay.

- There is very less time left for students to play games and other physical activities because a major portion of their recess time is consumed in the serving and eating of mid day meals.

- Some teachers were not aware about the objectives of launching Mid Day Meal Scheme and consider it as a burden.

5.2.3 Major Findings of the Study in terms of Achievement of Objectives of Mid Day Meal Scheme

Mid Day Meal Scheme and increase in enrolment of students

The average enrolment of students per school is minimum (48.78) in session 2009-2010 in comparison to last ten successive sessions. There is continuous decline in enrolment of students (both male and female) per session from 1999-2000 to 2009-2010 in government primary schools of Himachal Pradesh. In other words neither cooked Mid Day Meal Scheme nor uncooked Mid Day Meal Scheme (distribution of food grains) has given a
boost to enrolment of students in government primary schools of Himachal Pradesh. But after the launching of cooked Mid Day Meal Scheme more female students are attending the government primary schools in comparison to male students. However the decline in enrolment may be attributed due to other factors such as mushrooming growth of private English medium schools in the locality and preference of parents towards these schools.

**Mid Day Meal Scheme and number of drop-outs**

The drop-out rate has been minimized to a large extent and from the session 2004-2005 to the session 2009-2010 i.e. (last six sessions) no drop-out case is reported by these government primary schools. In Himachal Pradesh there is major problem of students moving from government primary schools towards nearby private schools.

**Mid Day Meal Scheme and the attendance of students**

In the month of April, 2009 the percentage of students having attendance 80% or more was low as it was 76.69% for class III and 79.86% for class V as compared to May and June, 2009. In the month of May, 2009 the percentage of students having attendance 80% or more was 97.34% for class III and 98% for Class V. Similarly for the month of June, 2009 it was 98.59% for class III and 98.18 for class V. Maximum attendance of students was noticed for the month of May and June, 2009 as more than 97% students at primary school stage were attending the school daily. So along with other schemes and programmes, Mid Day Meal Scheme is also boosting the attendance of students in both pre and post lunch sessions in the government primary schools of Himachal Pradesh.
**Mid Day Meal Scheme and the number of underweight and under-nutrient students**

In session 2009-2010 the percentage of under-weight and under- nutrient students from classes I-V in these sampled government primary schools was 6.21%. Thus it can be concluded that Mid Day Meal Scheme is improving the nutritional status of the primary school students studying in government primary schools of Himachal Pradesh.

**5.2.4 Major Findings of the Study based on Teachers’ Perceptions towards Mid Day Meal Scheme**

**Teachers’ perceptions with regard to achievement of objectives of Mid Day Meal Scheme**

- A large majority of government primary school teachers (76.12%) were of the view that the Mid Day Meal Scheme is helping to achieve the goals of Universalization of Elementary Education, whereas 21.10% teachers were not certain whether the Scheme is helping to achieve the goals of UEE or not. Only a small percentage of teachers (2.78%) responded that the Scheme is not helping to achieve the goals of universalization of elementary education.

- Maximum number of teachers (94.45%) responded that there is no increase in enrolment at all and 5.12% teachers noticed very little increase in enrolment in their school as a result of Mid Day Meal Scheme.

- Maximum number of teachers (86.99%) considered that there is much increase in the attendance of students after the implementation of cooked Mid Day Meal Scheme, whereas only a small percentage of teachers (10.23%) noticed very little increase. The teachers presently working in government primary schools of Himachal Pradesh have expressed that this Scheme is helping to retain the students in school after post lunch
sessions and hence improving the attendance in both the sessions i.e. pre lunch and post lunch sessions.

- A small percentage of teachers (2.56%) felt that Mid Day Meal Scheme is reducing the number of drop-outs in government primary schools of Himachal Pradesh while almost all the primary school teachers (96.16%) responded in a negative manner and provided the reason that there is no problem of drop-outs in their schools. Children, whom we call drop-outs, are very rare.

- Large majority of teachers (76.34%) revealed that there is no improvement in learning levels of students specially those belonging to disadvantaged section of society neither by Mid Day Meal Scheme nor by any other programme. The views of 22.17% teachers were that there is very little improvement in the learning levels of students and only seven teachers (1.49%) considered that there is definite improvement in the learning levels of students after the introduction of cooked Mid Day Meal Scheme.

- Views of 30.28% teachers were that as a result of Mid Day Meal Scheme there is very little improvement in the nutritional status of students of their school, whereas a good number of teachers (36.04%) considered that there is no improvement in the nutritional status of children of their school.

**Teachers’ perceptions with regard to quality of meal provided under Mid Day Meal Scheme and its preparation**

- Large majority of teachers (78.68%) stated that the mid day meal, which is provided to the children of their school, is a balanced and nutritious diet. The responses of only 4.48% teachers were not in favour of the idea contained in this statement and responded that still more quantity of food grains and other ingredients are needed in order to make it nutritious and balanced diet.
• Generally, the teachers considered mid day meal as nutritious and balanced diet responded that it can protect the children from malnutrition and other diseases caused due to malnutrition.

• A large majority of teachers (75.69%) were satisfied from the quality of mid day meal and plead that maintaining the quality of meal in their school is their own responsibility and depends mainly on the teachers of that particular school. Whereas, 15.99% teachers were satisfied upto some extent and considered that the Mid Day Meal Scheme still needs a lots of improvement.

• Average quality (between 15 to 20 rupees per kg.) of food grains (rice) for Mid Day Meal Scheme is provided by F.C.I. to these government primary schools, as majority of the teachers (68.02%) have expressed such views.

• Maximum number of teachers (89.13%) perceived that during preparation of mid day meal in the school all possible precautions are taken by the cooking staff and they also supervised the process of preparation of mid day meal daily.

**Perceived Effect of Value Inclination and Development of Hygienic Habits among Students**

• Almost all the teachers (96.59%) perceived that the values of love, brotherhood, cooperation and discipline are developing in the students as a result of sharing of common meal provided under Mid Day Meal Scheme.

• The views of maximum number of teachers (90.41%) were that this present Mid Day Meal Scheme is able to eradicate discrimination based on caste. But 9.59% teachers have expressed that the roots of these malices lie deep in the society and cannot be eradicated by Mid Day Meal Scheme alone.
• All teachers (100%) responded in unison that there is no discrimination with any student belonging to any section of society in the school at the time of distribution of mid day meal.

• Almost all the teachers (99.97%) perceived that there is development of hygienic habits (like washing hands, cutting nails, washing their plates properly etc.) in the children as a result of Mid Day Meal Scheme.

**Teachers’ perceptions regarding their own role**

• Almost all the teachers (97.66%) responded that the management of Mid Day Meal Scheme is a problem to them because along with supervision of Mid Day Meal Scheme they have to make all possible arrangements and have to maintain the records of the Scheme daily.

• The perception of maximum number of teachers (89.77%) was that teachers should be free from its responsibility so that they can utilize their time for teaching-learning activities. The responsibility of implementation of Mid Day Meal Scheme should be handed over to any responsible private local agency.

• About half the number of teachers (50.11%) believed that there is no problem of motivation on their part, whereas 46.49% teachers admitted that for proper implementation of Mid Day Meal Scheme in government primary schools they are not motivated and they have to implement the Scheme as per orders from the State government.

• Majority of the teachers (60.55%) opinioned that implementation of various schemes like SSA, Mid Day Meal Scheme etc. is a primary concern in government primary schools whereas teaching is at secondary place. A good number of teachers (39.45%) do not think so.

• A good number of teachers (37.10%) perceived that there is no need of Mid Day Meal Scheme in Himachal Pradesh and provided the reason that
parents are capable of providing lunch to their children, but 17.91% teachers realized its need in the State of Himachal Pradesh.

- The responses of almost all the teachers (98.72%) were that Mid Day Meal Scheme wastes the teaching-learning time of teachers and students.
- More than half the number of teachers (51.60%) were in favour of providing hot cooked mid day meal daily to the students in the school, whereas 48.40% teachers were in favour of providing food grains to the students per month.
- The major reasons for decline in enrolment of students in government primary schools of Himachal Pradesh is mushrooming growth of private English medium schools in the locality as perceived by 97.02% teachers.

**Perceived Effect of Mid Day Meal Scheme with respect to some Miscellaneous Factors**

- The responses of almost all the teachers (99.57%) were that after the launching of cooked Mid Day Meal Scheme there is no inspection by parents/guardians of children in the context to this Scheme.
- The analysis indicates that only a small percentage of teachers (4.05%) have expressed that students feel sleepy after taking mid day meal, whereas a large majority of teachers (78.04%) were of the view that students do not feel sleepy.
- Maximum number of teachers (87.85%) perceived that the meal, which is provided to the children under Mid Day Meal Scheme is liked by the students, whereas 12.15% teachers expressed that they do not know whether the students like the meal that is provided to them under Mid Day Meal Scheme or not.
- The perceptions of almost all the teachers (96.59%) were that there is no wastage of mid day meal by the students. It has been expressed by 2.98%...
teachers that the problem exists sometimes in case of small kids up to class II.

- The views of almost all the teachers (98.30%) were that there is no problem of insanitation in the school from the meal left by the children.
- Almost all the teachers (96.16%) responded that there is no help received on the part of local people for the implementation of Mid Day Meal Scheme. Only 3.84% teachers reported that they receive little help from the local community for Mid Day Meal Scheme implementation.

5.2.5 Attitude of Primary School Teachers towards Mid Day Meal Scheme

- Male primary school teachers have significantly more favorable attitude towards National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) as compared to their female counterparts, as a whole as well as in terms of more and less levels of teaching experience.
- There is no significant difference in the attitude of less experienced and more experienced male primary school teachers towards Mid Day Meal Scheme.
- There is no significant difference in the attitude of less experienced and more experienced female teachers towards Mid Day Meal Scheme.
- There is no significant difference in the attitude of more experienced and less experienced primary school teachers towards Mid Day Meal Scheme.
- Primary school teachers belonging to general category have more favorable attitude towards Mid Day Meal Scheme in comparison to primary school teachers belonging to scheduled categories (S.C.+S.T.+O.B.C.).
5.2.6 Major Findings of the Study based on Parents’ perceptions towards Mid Day Meal Scheme

Parents’ perceptions with regard to preparation, serving and quality of mid day meal

- Majority of parents (62%) considered that the mid day meal is prepared in school with all possible precautions and cleanliness. About one forth (24%) responded that they do not know whether the mid day meal is prepared with all possible precautions and cleanliness or not.

- Almost all the parents (96.60%) perceived that there is no discrimination with their children based on caste at the time of serving mid day meals in school.

- Large majority of parents (75.80%) perceived that their children fed properly in the school at the time of mid day meal with love and care and their teachers supervised the whole process. The views of 22.20% parents were that they are not aware how the children fed in the school.

- Large majority of parents (76.60%) were satisfied with the quality of meal provided under Mid Day Meal Scheme. The quality of the meal is average. Some parents reported that the children are getting better meal in school as compared to their home.

Perceived Effect of Mid Day Meal Scheme on Health of Children

- Almost all the parents (98.80%) perceived that their children never fall sick after taking mid day meal in the school.

- A good number of parents (45.40%) responded that they do not know about improvement in the health status of their children as a result of Mid Day Meal Scheme whereas, 42.60% parents perceived that their children are healthier and active after taking mid day meal regularly in the school.
Parent’s perceptions regarding importance of Mid Day Meal Scheme

- A good majority of parents (73.80%) expressed that providing cooked meal in school under Mid Day Meal Scheme is a better mode of supply, whereas 19.40% parents were in favour of providing food grains (rice) to the children every month.

- A good majority of parents (72%) responded that Mid Day Meal Scheme should not be closed and it is a good Scheme. Their children are benefiting from this Scheme. Nearly one fourth of the parents (24.20%) considered that Mid Day Meal Scheme should be closed as this Scheme is adversely affecting the teaching-learning activities in the school.

- A large majority of parents (76.40%) were in favour of Mid Day Meal Scheme and responded that the government is providing free of cost lunch to every child and it is a beneficial Scheme and hence their children need this Scheme. The perceptions of 23.60% parents were that they can afford to provide a lunch for their children and their children need quality education in the school and not only the mid day meal.

Parents’ perceptions concerning effect of Mid Day Meal Scheme on teaching learning activities

- A good number of parents (41.60%) revealed that there is improvement in learning levels of their children attributable to Mid Day Meal Scheme, whereas 25.80% parents did not observe any improvement in the learning levels of their children as a result of Mid Day Meal Scheme.

- Majority of parents (60%) stated that there is wastage of teachers’ time in school due to Mid Day Meal Scheme because they have to manage for the smooth implementation of the Scheme and side by side have to maintain the whole records. As per parents’ perceptions teachers are busy in
maintaining the records of different activities in the school and the level of students’ performance is becoming poor day by day.

- Generally the parents considered that Mid Day Meal Scheme is wasting the teachers’ time in school responded that Mid Day Meal Scheme has an adverse effect on children’s studies. The views of 22.80% parents were that there is no adverse effect of Mid Day Meal Scheme on children’s studies and 17.50% parents were not aware regarding this item.

- The responses of 48% parents were that presently implementation of Mid Day Meal Scheme is more important than teaching-learning activities in the school, but the perception of 34% parents were contrary to this and they expressed that the main concern for teachers in the school is teaching-learning. The responses of 18% parents were undecided.

- Maximum number of parents (90.20%) stated that teachers should pay more attention towards students’ studies than on Mid Day Meal Scheme. A small percentage of parents (5.80%) were undecided to this item.

Perceived effect Mid Day Meal Scheme with respect some miscellaneous factors

- A good number of parents (39.80%) responded that they do not know whether teachers are also taking benefit of the Mid Day Meal Scheme or not. But the views of 36% parents were that teachers are also enjoying Mid Day Meal Scheme in the school and they take mid day meal daily in the school.

- Maximum number of parents (93%) admitted that they do not help the school concerning Mid Day Meal Scheme because the government schools have enough resources to implement this Scheme. Only a small percentage of parents (7%) reported that a little occasional help was given to the school teachers on their demands simply in terms of firewood, locally available fresh vegetables etc.
• Maximum number of parents (83.40%) reported that they do not send their child to school because of Mid Day Meal Scheme, but it is their duty to provide education to their children even if Mid Day Meal Scheme is not in operation. Only 9% parents responded that they send their child to school as a result of Mid Day Meal Scheme.

• Maximum number of parents (90.20%) noticed the development of hygienic value in children and reported that children also wash their hands before eating at home and take their meal properly.

5.2.7 Students’ Reactions towards Mid Day Meal Scheme

• All students (100%) responded that they get mid day meal regularly in the school during lunch break.

• Almost all the students (95.43%) responded that they like the mid day meal that is served to them in lunch break under Mid Day Meal Scheme. Only a small percentage of students (4.57%) responded negatively.

• Maximum number of students (85.43%) reported that there is proper sitting arrangement at the time of distribution of mid day meal in school, but 14.57% students were not satisfied with the sitting arrangement and responded that they have to take their meal on the floor without any mat.

• One fourth of the respondents (25%) reported that their teachers do not supervise the mid day meal distribution while, a large majority of students (75%) were agreed and responded that at least one teacher is always with them at the time of meal distribution.

• All students (100%) responded that they are fed properly with love and affection in the school.

• All primary school students (100%) expressed that at the time of distribution of mid day meal they sit together without any discrimination.

• Almost all the students (99.79%) said that they have never fallen ill after taking mid day meal in the school.
• A good number of students (40.79%) admitted that their attention is often diverted towards the meal during the class and majority of students (59.21%) refused to admit that their attention often gets diverted towards the meal during the class hours.

• Majority of students (62.02%) accepted that as a result of Mid Day Meal Scheme there is less time left for playing games and other physical activities in the recess time. But a good number of students (37.98%) responded that there is no such problem of less time in the recess.

• Only 30.65% students reported that they feel sleepy after taking mid day meal in the school, while 69.35% students responded negatively.

• A good majority of students (74.05%) agreed that their parents inquire about the mid day meal. About one fourth of the students (25.95%) said that their parents are not interested in knowing what they have taken in the school under Mid Day Meal Scheme.

• A good majority of students (72.17%) responded that there is proper arrangement of water and soap for washing hands in their schools.

• Almost all the students (97.39%) felt that there is no problem of scattering of leftover meal in the school and hence the environment of the school is hygienic.

• Maximum number of students (91.52%) said that they are attending the school regularly because of the mid day meal provided in the school.

• A good number of students (37.02%) accepted that they do not wash their plates properly after taking mid day meal but, majority of students (62.98%) said that they wash their plates properly after taking mid day meal.
5.2.8 Various Problems Obstructing the Achievement of Objectives of Mid Day Meal Scheme in Himachal Pradesh

- There is no separate kitchen in the schools for preparation of mid day meal and the preparation of meals in the same surrounding near the classes disturb the students and teachers. The attention of students is distracted due to this inappropriate distance of kitchen from classrooms.

- Proper storage provisions are not available in most of the schools. There are ad-hoc arrangements for storing items and in many schools they are kept in the school office, staff room or in the classrooms.

- There are no safety provisions in case of any accident like fire, leakage of gas cylinder etc.

- The grant for Mid Day Meal Scheme is not made available timely by the concerned department dealing with Mid Day Meal Scheme. Teachers have to pay from their own pocket in case of delay in grant.

- The irregular supply of L.P.G. cylinders is also a major problem for teachers.

- There is urgent need to increase the funds for Mid Day Meal Scheme by taking into consideration the current inflation rate. There is no match between government approved rates and the market rates as the government approved rate for cooking oil is Rs. 52 but in the market its cost is nearly Rs. 70 and the same is the case with vegetables.

- The honorarium for helpers and cooks is very less and it is difficult to find suitable trained person for the job within this amount and it should be increased. Sometimes due to this problem of less honorariums they do not bother what the teachers are saying and do not follow the guidelines.

- There is no participation and help received from the local community for the implementation of Mid Day Meal Scheme.
• There is no *night chowkidar* in the school so a fear in the mind of teachers is always there about theft of food articles and cooking vessels from the school.

• The daily maintenance of Mid Day Meal Scheme registers also wastes teachers time and finally the students are the sufferer.

• Fresh vegetables are not available daily in the tribal schools and hence it is better to provide locally available dishes as *momo, thupka* etc. for children.

• There is less time left for students to play games and other physical activities.

• Apart from these another problems are overeating on the part of students, sometimes objection of the local people for sharing of mid day meal jointly by students of different castes, problems related to handicapped children, non enrolled children who came to school with their brothers and sisters and also take mid day meal and teachers cannot ignore them and sometimes students yawning in the class and feel sleepy.

**5.2.9 Suggestions for Making the Mid Day Meal Scheme More Effective**

• Teachers should be relieved of all Mid Day Meal Scheme responsibilities, except supervising the preparation and distribution of mid day meal.

• Mid Day Meal Scheme should be handed over to any responsible local agency like Anganwari, Gram Panchayat, Mahila-Mandal or NGOs which may implement the Scheme and maintain the whole records. No scheme should be implemented at the cost of teaching time of the teachers.

• Separate kitchen-cum-store should be made available to all government primary schools and it should be at an appropriate distance from the classrooms.
• The Mid Day Meal Scheme should be implemented in such a manner that in any circumstances it does not adversely affect teaching-learning activities in schools.

• The grant for Mid Day Meal Scheme should be increased by taking into consideration the inflation rate and should be provided monthly well in time.

• Adequate number of teaching staff must be there in all government primary schools of Himachal Pradesh only then this Scheme and other schemes can be implemented effectively.

• The participation of the local community in the implementation of Mid Day Meal Scheme should be encouraged by involving many of them in the various developmental plans started by State government in the schools.

• The honorarium for helpers and cooks must be increased so that they can be motivated towards the preparation of better meal for the children with satisfactory income.

• To maintain Mid Day Meal Scheme registers and cash books one post of clerk should be created in the centre government primary schools and paper work of government primary schools under that centre school will be carried out by him.

• There should be the provision of locally available fresh fruits and milk in place of mid day meal for twice a week.

• The L.P.G. cylinders and quota of the food grains should be made available to the government primary schools on priority basis.

• Electronic governance shall be adopted as the management technique.

• The centralized kitchen is a practice for the management of Mid Day Meal Scheme. All schools cannot be managed under the centralized scheme but it is possible only in such areas where schools can be clustered as a unit for timely delivery of mid day meal.
5.3 EDUCATIONAL IMPLICATIONS OF THE STUDY

National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) is a noble scheme and operating in all over the country in the government and government aided primary schools. It has several implications to the field of education. Some of the important educational implications are given below.

- As reflected by the present study all possible arrangements in terms of human and material resources should be made prior to the launching of the programme otherwise, it can adversely affect teaching-activities in the schools. In all the sampled government primary schools there was no provision of separate kitchen-cum-store, only temporary arrangement were there for storage of food ingredients in these schools.

  The Ministry of Human Resource Development, Government of India and State Government of Himachal Pradesh should ensure that adequate infrastructure viz. provisions of separate kitchen cum store having appropriate distance from classrooms, kitchen devices, facility of drinking water and separate toilet facilities for boys and girls are available in all government primary schools. It should put in place a system to ensure that the teaching time of the teachers is not lost in connection with the Mid Day Meal Scheme and there is no adverse impact of the Scheme on the primary objective of education.

- It has been stated clearly in the guidelines for Mid Day Meal Scheme that this programme is meant to boost children’s participation and learning at the primary school stage and not to interfere with it. The programme should not be implemented in such a manner that it in any way adversely affects either the duration or quality of actual teaching learning in school.

  The actual situations in government primary schools of Himachal
Pradesh are contrary to this. It is distracting both teachers and students. A main part of teachers teaching time is consumed in the implementation of Mid Day Meal Scheme. There is urgent need to shift the responsibilities of implementation of Mid Day Meal Scheme to any other local agency along with providing independent staff to coordinate meals and guaranteeing cooks at least a minimum wage salary, will allow teachers to focus on their primary responsibility i.e. educating the children.

- Organization of such a Scheme on a massive scale certainly involves careful planning and execution. Identification of the implementing agencies is critical for the success of the Mid Day Meal Scheme. Most of the agencies were Self Help Groups (SHGs) whose main activity was micro-credit and thrift. These agencies may be actively involved to take up the responsibility of providing cooked meal for the school children.

- There was a qualitative shift in the focus of the Scheme in September 2006 from education (with its emphasis on enrolment, learning levels and attendance) to nutrition and health. The government of Himachal Pradesh needs to establish a system to ascertain the improvement in nutritional levels of the children. It should coordinate with Ministry of Health and Family Welfare to ensure maintenance of health cards in all government primary schools to monitor the health status of the children.

- The data on enrolment, attendance and retention flows from the school level to state level in a transparent manner with records of compilation maintained at each level i.e. school level, district level and state level. Periodical checks should be arranged to crosscheck the data (status of enrolment and monthly attendance of students) for accuracy.

- Even after more than a decade of running the programme, there are evidences of lack of clarity regarding the objectives to be achieved by the
The Ministry of Human Resource Development should set realistic and specific objectives for Mid Day Meal Scheme. It should prescribe outcome indicators to measure and report on improvements in education, health and nutrition. It should use/analyze the data received from the States for such an evaluation.

- The results of present study revealed that at the time of distribution of mid day meals in schools there was no discrimination with children on the basis of caste and religion but a study conducted by Ram (2008) pointed out that in 24% government primary schools in district Mandi of Himachal Pradesh the sitting arrangement of students were based on their caste and students from upper and lower Hindu castes do not share common mid day meal jointly in schools. Mid Day Meal Scheme can facilitate the process of socialization of children in a class and caste ridden society. There should be no discrimination with children on the grounds of gender, class, caste and religion. Teachers have to play key role in this regard through inculcating in children a spirit of equality for which education is making all possible efforts. Along with teaching in class teachers can set examples by taking their lunch together without consideration of their caste and also with students of different social groups.

- The results of the present study indicated that female primary school teachers have significantly less favorable attitude towards Mid Day Meal Scheme as compared to their male counterparts, as a whole as well as in terms of more and less levels of teaching experience. Similarly, primary school teachers belonging to scheduled categories (S.C.+S.T.+O.B.C.) have significantly less favorable attitude towards Mid Day Meal Scheme in comparison to primary school teachers belonging to general category. There is need to orient the primary school teachers about potential
benefits of Mid Day Meal Scheme and its role in UEE during in-service teacher training programmes.

- Guest lecturers in DIETs by nutrition experts may be organized for primary school teachers specially with the focus on maintaining the nutritional value of mid day meals.

- The results of the present study indicated that the community participation in the management of Mid Day Meal Scheme is almost nil. Efforts need to be made to encourage and motivate the community participation in the management of the programme to make it sustainable and useful. The SMC/VEC/Panchayats should be associated as compulsory basis in the field of strengthening primary education in the State. They should be awarded for their commendable work in case they perform well.

- Values of love, cooperation, brotherhood, help, caring, hygiene and work experience can be developed as a result of Mid Day Meal Scheme only if it is implemented in planned and systematic way.

- Mid Day Meal Scheme should act as a foundation for the success of other schemes in the State (like SSA) in terms of qualitative as well as quantitative improvement in primary education.

- The present study revealed that the cooks working in government primary schools of Himachal Pradesh for preparing mid day meals are untrained. They need to be trained on preparation of nutritious and tasty food, scientific handling and processing of food. For this, the services of Food and Nutrition Board, Government of India can be utilized.

- The results of the study have shown that Mid Day Meal Scheme is not helping to boost the enrolment of the students in government primary schools of Himachal Pradesh. Parents now a day preferred to provide
education to their children in private schools equipped with all the modern facilities such as computer facility, well furnished infrastructure, adequate number of teaching staff etc. and their number is growing in the State. No doubt it is a good sign for the progress of primary education in the State but it seems that such facilities should be provided in government primary schools also in conformity with the act of Right to Education.

- All possible measures should be taken so that the recess time of students is not crushed due to operation of one or the other schemes in the school. The head teacher of the school must ensure that the time table of the school is followed by teachers properly and there is adequate time available for students to play in the recess time after taking mid day meals.

- The delay in the release of funds has caused several problems because these institutions have less financial resources and teachers have to pay from their own pockets. The concerned agencies dealing with financial aspect of Mid Day Meal Scheme should help in timely release of the monthly funds.

- The Ministry of Human Resource Development, Government of India and State governments need to strengthen the internal controls as well as the inspection and monitoring mechanism at all levels. Accountability for maintenance of records as well as maintaining the standard of mid day meals at various levels should be prescribed and monitored.

- There is no night chowkidar in the government primary schools so a fear in the mind of teachers is always there about theft of food articles, L.P.G. cylinders and cooking vessels from the school. To depute night chowkidar in the every government primary school is a huge financial burden. As far as possible where government primary schools are situated nearer to
government high/senior secondary schools, the services of *night chowkidar* working in these government high/senior secondary schools can be sought.

In case we are seriously interested in the achievement of objectives of the Mid Day Meal Scheme in letter and spirit it is suggested that a serious thought is given for the implementation of various implications of the present study. In the absence of this there is apprehension that we may distract ourselves from the primary objective of imparting quality education to the children in their formative years. Thus defeating the very purpose of the Scheme.

**5.4 SUGGESTIONS FOR FURTHER RESEARCH**

The scope of present study was delimited in a number of ways. Hence some suggestions in the continuity of this research endeavour are laid down for further research.

1. Further researches may be undertaken with large sample covering all the districts of the State, so as to make generalizations with regard to the perceptions and attitude of the headmasters, parents, cooks and primary school teachers.

2. Teacher factor is an essential human resource in school education, and hence teacher competencies and issues related with teacher empowerment are to the focal area of future researches in primary education.

3. School-community partnership in primary and elementary education, specially the role of local bodies, under ‘Sarva Shiksha Abhiyan (SSA)’ is an emerging area for exploration to evolve workable mechanism for effective schools.
4. An evaluative study can be conducted to assess the effectiveness of Mid Day Meal Scheme in elementary schools of Himachal Pradesh.

5. A comparative study to evaluate the effectiveness of Mid Day Meal Scheme in tribal and non-tribal areas of Himachal Pradesh can be undertaken.

6. A study can be undertaken for investigating the effect of Mid Day Meal Scheme on the quality of education in the government primary schools of Himachal Pradesh.

7. A research can be undertaken to study the causes of decline in enrolment of students in the government primary schools of Himachal Pradesh.

8. Evaluative studies can be conducted to assess the effectiveness of Mid Day Meal Scheme in other States of India.