CHAPTER – 1

INTRODUCTION AND REVIEW OF RELATED LITERATURE

Ever since the independence, India has been relying on the educational system for bringing about societal changes. It would not be an exaggeration to say that the country expected education to do wonders for it. Keeping this in view many commissions and committees have been appointed by Governments from time to time, to give suggestions for improvement in the education system of the country. The most significant common recommendation of all these commissions and committees has been the universalization of elementary education. The targets have been fixed, revised, refined and again re-revised to achieve universalization of elementary education. Despite efforts, a majority of the masses continue to remain deprived of elementary education. And the country is still one of those nine countries of the world where there is a heavy concentration of illiteracy and a higher incidence of poverty. The poor masses of the country are so pre-occupied with their economic pursuit for survival that they cannot even think of sparing their children for education, in their perception, that has little relevance to their everyday life.

Various schemes have been made and implemented for the elementary education sector by the Government to reach the disadvantaged population. However, despite this, crores of children are still deprived of elementary education due to inability of their parents to send them to schools because of their poor economic status. For, these parents, sending their children to school means not only incurring extra financial burden but also depriving them of some money which their children would have earned otherwise by doing labour.
In laborers working on Salal Hydro Project vs. State of J & K case (March 2, 1983), the Supreme Court considered the root cause of the problem, that why most of the parents did not send their children to schools. It was pointed out that augmenting their meager earnings through employment of children is very often the root cause of this problem. This is also the reason for large drop outs from schools. There are millions of street children and child labourers in India. Instead of being provided with basic education, good health, care etc. they are sent out to streets or a work place to supplement the income of their families. Both the poor economic situation of the masses and their unfavorable attitude to education are adversely affecting the efforts for achieving universalization of elementary education. It has therefore become imperative to analyse this situation.

On the other hand, education at its best seeks to make better human beings, it is very important for the progress of individual and society. Education equips the child to become a useful member of the society and to play a constructive role in the socioeconomic development of the country. It is education which plays a vital and important role in fulfilling the basic needs of a common man viz. food, shelter and clothing. The main aim of education is to prepare and develop the child physically, mentally and spiritually to lead a quality life. Education is a process through which a child is made capable to attain the necessary competencies and skills to face the challenges in life to survive, and to make struggle for existence. Plato remarks, “Education develops in the body and in the soul of the pupil all the beauty and all the perfection of which he is capable of”. Aristotal explained education as “the creation of a sound mind in a sound body”. In the words of Gandhi ji, “By education I mean an all round drawing out the best in child and man body, mind and spirit”. It is clear from
these views of educationists that, sound mind cannot be created, beauty and perfection in soul cannot be developed and even best in the child cannot be drawn out of weak body.

The Education Commission (1964-66) remarked that “Destiny of our nation is being shaped in our classrooms”. It has become even more relevant in the recent years. As the formal education has become a necessity to achieve the goal of national development and aim of education i.e. all round development of the individual. Today in India, many children have to work for the household in the morning and walk long distance to the schools with empty stomachs, this is more conspicuous with the girl child who has to fend a helping hand to the mother and then attend the school. These children stay at school for more than five to six hours a day and even longer, without taking food from their home. In these conditions mere feeding the mind of pupils with all kinds of information will not help in developing all the faculties of the children. Extensive emphasis on only intellectual aspect of human personality is against the fundamental principle of education.

Further, Gandhi ji once remarked that, “To the hungry, food is God”. Parulekar a follower of Gandhi ji also introduced a sociological perspective to education by talking in terms of ‘needs’ of Indian pupils. He drew attention to the interface between education and society and felt strongly that in order to promote literacy in all sections of society, it is important that education is related to the real needs of people.

One century ago, Muckraker Robert Hunter (1904) expressed his concern for malnourished children in school. His argument is still valid today:
"... but the poverty of any family is likely to be most serious at the very time when the children most need nurture, when they are most dependent, and when they are obtaining the only education which they are ever to receive ... Learning is difficult because hungry stomachs and languid bodies and thin blood are not able to feed the brain. The lack of learning among so many poor children is certainly due, to an important extent, to this cause ... It is utter folly, from the point of view of learning, to have a compulsory school law which compels children, in that weak physical and mental state which results from poverty, to drag themselves to school and to sit at their desks, day in and day out, for several years, learning little or nothing."

School age is a dynamic period of growth and development as children undergo physical, mental, emotional and social changes during this period. It is one of the crucial periods of life, as about 40% of the physical growth and 80% of the mental growth take place during this period. The purpose of education is to identify the inner potentialities of the individual and provide all kinds of nourishment so as to enhance healthy growth and development of the individual to contribute to the well being of the society.

A hungry child is less likely to attend school regularly. Hunger drains of their will and ability to learn. Chronic hunger can lead to malnutrition. Chronic hunger also delays or stops the physical and mental growth of children. Poor or insufficient nutrition over time means that children are susceptible to diseases like measles or dysentery, which can kill malnourished children. Malnutrition adversely affects Universalization of Elementary Education. Even if a malnourished child does attend school, she finds it difficult to concentrate on and participate in the teaching learning activities in school. He or She therefore tends to drop-out, because of the inability to cope with studies. If the child does not actually drop out his or her attainment level tends to be low.
Therefore in a country like India, to achieve universalization of education we have to fight on several fronts by providing immediate relief from hunger, disease, malnutrition etc. and creating conditions that would not let us lapse into poverty. As it is a well recognized fact that the educational development of children cannot take place without adequate attention to their health and nutritional status. Thus Indian Constitution under Article 47 has directed state governments that, they shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties. Even under the auspices of the UNICEF, India has provided every child the right to life and well – being, health care, nutritious food, clean water and shelter, protection from conflicts and injustice, education to acquire knowledge etc. These rights have been given but not realized.

(Source: Sinha, D. in Atal (ed.), 1997)

**Figure 1.1: Showing Poverty and its behavioral outcome.**

Even today malnutrition is widely prevalent in India among growing children. By and large they are government school going children from poor families who cannot afford one square meal a day and are facing two types of hunger. The first is overt (or raw) hunger, or the need to fill the belly every few hours. The second type of hunger is
“hidden hunger” for micronutrients. (e.g. vitamins, iron, iodine, zinc, calcium) that are required in tiny amounts. The National Nutrition Monitoring Bureau (2002) has clearly brought this out in its report on Diet and Nutrition status of Rural Population that, rural child in the one to six age group does from a deficiency of calories (about 40 percent) and proteins (about 10-20 percent), the deficits with regard to vitamins are truly alarming: about 75 percent for vitamin A, 65 percent for Vitamin C, 70 percent for riboflavin or vitamin B2, 35 percent for folic acid and so on. The deficits of minerals are also very large, e.g. about 70 percent for iron and 65 percent for calcium.

Doctors working in rural areas in Punjab have found that a large number of school children dropped out of schools were suffering from acute iron deficiency anemia (IDA). Most of such students stopped going to school as they were unable to carry out normal activities due to lack of energy and concentration. “We examined several children who had left school on the pretext that they were not able to understand anything. We got their hemoglobin checked and found them highly anemic,” said Dr. Aslam Parvez, president of the Rural Medical Service Association (2004).

Many studies have proved that there is direct relationship between school performance and nutritional status of the child. Research suggests that providing students with opportunities to refuel with nutritious snacks and burn off some energy with physical activity can help maximize instructional time by improving attentiveness and decreasing disciplinary problems. Opportunities for healthy snacks and physical activity during the school day can help students to be more attentive during instruction. Healthy eating habits, including participation in school breakfast programs, are associated with higher academic test scores, improved daily attendance, and better classroom behavior (Miller Patti, 2011). Malnutrition at any stage of childhood affects
schooling. Both underweight and micronutrient deficiencies – undermine educational attainment and, thus, the lifetime-earnings potential of the child. Some of the pathways through which malnutrition affects educational outcomes include a reduced capacity to learn (as a result of early cognitive deficits or lowered current attention spans) and fewer total years of schooling (Gragnolati, Shekar et al., 2005).

All these factors necessitate the provision of school feeding programme for all children. The ultimate goal of such school feeding programmes is in order to attain education, overcome food insecurity and health concerns. Even this has become a major concern of the United Nation Organisations as well. Once James T. Morris, Executive Director, UN World Food Programme said “Providing food and education is the single most important thing we can do for the development of the individual and his or her nation.”

A properly designed nutritional support can be an additional incentive to help poor families meet expenditure incidental to effective learning and thereby can be a component of the package economic, pedagogical and institutional measures required for Universalisation of Elementary Education (UEE). Effective delivery of nutrition support is in conceivable without the facilitative role of the local community….The success of the ‘Green Revolution’ and development of a large scale public distribution system have also created conditions facilitative for nutrition support for education. (Report of the Committee on Mid-Day Meals, 1995)

In India school feeding programmes have been functioning in various states of the country for over six decades, sponsored by many organizations from time to time. But in an attempt to address the problems of health and education at national level, the government created a solution in the form of National Programme of Nutritional
Support to Primary Education, commonly known as the Mid-Day Meal Scheme (MDMS) in 1995. In 2007, the name of the scheme has been changed to ‘National Programme of Mid-Day Meals in Schools’. Mid-Day Meal Scheme is essentially a child welfare programme. The idea behind this scheme was to develop the ignored aspect of child’s development that is physical health of pupils, by providing nutritional diet in schools. This scheme is considered to be the most potential incentive for children belonging to disadvantaged class of society to attend school regularly and improve their health and academic status at the same time. Due to these considerations educational administrators and researchers world over deliberated upon different aspects of this incentive.

Now the question arises why schools have been selected for the same? Schools are recognized as institutions that not only provide children their right of education but must also be seen as the only institutions that can offer all other rights to children. In fact, this is a clear understanding from Supreme Court’s historic judgment, of November 2001, having far reaching implications for defining the role of schools, and the need to have every child in school. Provision of cooked food in all the states would mean that schools have a role in providing better nutrition for children and alleviating hunger among children. It is felt that it is only when all children are in schools that their freedom from hunger is possible, and policy endeavors for their care and protection and a realization of their fullest potential can be achieved. Therefore in order that children secure their rights such as right to food, right to health, right to education it must be predicated by the act of all children actually being in school (Sinha, 2004).
1.1 What is Mid-Day Meal Scheme?

On **August, 1995**, Mid-Day Meal Scheme was launched as a centrally sponsored scheme by the Ministry of Human Resource Development (Department of Education) with the objective of “Universalization of primary education by increasing enrolment, retention and attendance and simultaneously impacting on nutrition of students in primary classes”. This scheme covers students of class I to V in government elementary schools, elementary schools aided by government and primary schools run by local bodied. Under this scheme, cooked Mid-Day Meals were to be introduced within two years. Until 2001, however the Mid-Day Meal Scheme was not implemented and most of the states were providing “dry rations” (food grains) at the rate of 3 kgs. per students per month, having minimum attendance of 80 percent. On November 28, 2001 Supreme Court in the “right to food” case directed all the states supplying food grains (wheat/rice) free of cost on every govt. and govt. assisted primary school @ 100 gm per child, to serve cooked or processed hot meal with a minimum content of 300 calories and 8–12 gms. of protein each day of school for a minimum of 200 days within three months.

The Apex Court intervened and vide its orders dated 28th November, 2001. The Supreme Court directed:

1. “**We direct the State Governments/Union Territories to implement the Mid-Day Meal Scheme by providing every child in every Government and Government Assisted primary schools with a prepared Mid-Day Meal with minimum contents of 300 calories of energy and 8-12 grams of protein each day of school for a minimum of 200 days. Those Governments providing dry rations instead of cooked meals must within 3 months start providing cooked meals in all Government Aided primary schools in all half the**
districts of the state (in order of poverty) and must within a further period of 3 months extend the provisions of cooked meals to the remaining parts of the state."

2. “We direct the Union of India and the FCI to ensure provision of fair average quality grain for the scheme on time. The State/Union Territories and the FCI are directed to do joint inspection of food grains. If the food grains are found, on joint inspection, not to be of fair average quality, it has been replaced by the FCI prior to lifting”. 

Like many other states, Punjab could not switch over to cooked meal scheme from the very beginning due to few reasons inter alia due to paucity of funds involved in the conversion of food grains to cooked meal. However, in compliance with the Supreme Court’s order dated 28.11.2001, cooked meal was provided to the children of primary classes in one block in every district of Punjab during the year 2002-03. The government of Punjab started providing cooked meal to all the students of primary classes in government elementary schools with effect from September, 2004 and for this purpose, a sum of Rs. 666.00 lakh during the financial year 2004-05 was released to the Deputy Commissioners, who were also the Chairmen of the respective District level Steering-cum-Monitoring Committees for implementation of this scheme at district level. During the financial year 2005-06, a sum of Rs. 1309.86 lakh was released to the Deputy Commissioners as conversion cost for providing cooked meal to the students in the Government and Government-Aided Private Schools under the Scheme. Subsequently, it was extended to children enrolled under Education Guarantee Scheme (EGS) and Alternative Innovative Education (AIE) centers working under Sarva Shiksha Abhiyan Programme.
Very few states, however introduced cooked meal in primary schools before the Supreme Court’s initial deadline of February, 28, 2002. The deadline was later extended to January, 2005 by Supreme Court. Till October 2004, serving of cooked meal could not be universalized in eight states which included certain major states. In many of the remaining states, quality of meal served to children was not satisfactory. Keeping these aspects in view, changes in the scheme had become necessary. Following the Supreme Court’s orders the Government of India revised its guidelines for the Mid-Day Meal Scheme in 2004. According to these guidelines, the Mid-Day Meal Scheme was fully implemented in 20 states and all seven union territories, and partially in the remaining eight states, where scheme was not fully implemented. New guidelines were also provided for meals to be served during the summer vacations, in drought affected areas. Some states including Andhra Pradesh, Chhattisgarh, Karnataka and Tamil Nadu have been following this directive. The center after witnessing the successful implementation of the scheme revised the guidelines in 2006 and went a step further by increasing the calorific values of cooked food from 300 to over 450, 12 grams of proteins and adequate quantities of micro nutrients like iron, folic acid, vitamin A. In October 2007, the scheme was further revised to cover children in upper primary (classes VI to VIII). The scheme was again revised in April 2008 to extend the scheme to recognized as well as unrecognized Madarasas/Maqtabs supported under Sarva Shiksha Abhiyan (SSA) as Government Aided centres. The programme was extended to all areas across the country from 2008-09.
1.2 EMERGENCE OF THE PROBLEM:

Childhood is the period of rapid physical and mental growth, and development. Children’s nutritional requirements are higher per unit of body weight than those of adults. Good food, adequate in quality and quantity is essential to stimulate and maintain their growth, to regulate their body function, to repair the tissues already formed, and to supply energy for work. If children are not provided with the nourishment they need, undernutrition and malnutrition of one type or other will inevitably result, the type and degree depending on the nutrients lacking in the diet.

‘Undernutrition’ refers to inadequacy of calories, while the term ‘malnutrition’ is associated with poor quality of meals. Undernutrition indicates that ‘just more food’ is the prominent need, whereas malnutrition means that the diet is lacking in one or more essential nutrients: proteins, vitamins and minerals. Malnutrition is caused by a number of factors and is not a deficiency. Dr. W.R. Aykroyd, one of the eminent nutrition workers, expressed, “The tragedy of malnutrition in children in India is so much that it not only leads to high mortality, but also cripples and permanently damages the growing generation. Among the many crippling effects of malnutrition probably the most dangerous is the impairness of vision in children. Malnutrition is dangerous also as a very important cause of the high mortality rates among children in India.”

The problem of malnutrition affects not only the health of children, but also their attendance and performance in schools. Improperly or inadequately fed children cannot concentrate on their studies. In many parts of India, it is the custom for children to have a meal before they leave for the school and have no food until they return home in the late afternoon. Even more serious is the condition of children, of whom there are
doubtless many, who come to school with empty stomachs. Therefore, many who attend schools are not able to study their lesson with interest and enthusiasm.

These problems have challenged the attention of the Government of India, State Governments, educationists and social and nutrition workers. Realising that health of children is the most important asset to the community, the Government of India has given a prominent place to Child Welfare in the Community Development programme. Thus the Mid-Day Meal Scheme as a part of the programme of Child Welfare has come to occupy a prominent place in our national plans.

But this is not sufficient if we want to have good results from this scheme. We will have to evaluate its working and the expected outcomes again and again, so that we can amend and improve the planning and working of this scheme.

The present study was a humble attempt in this direction. It was intended to evaluate the working and impact of Mid-Day Meal Scheme in Bathinda District of Punjab.

1.3 STATEMENT OF THE PROBLEM:

An Evaluative Study of Mid-Day Meal Scheme in Bathinda District of Punjab

1.4 REVIEW OF RELATED LITERATURE:

Research takes advantage of the knowledge, which has accumulated in the past or result of constant human endeavor. It can never be undertaken in isolation of the work that has already been done on the problems, which are directly or indirectly related to a study proposed by a researcher. A summary of previous research studies provides evidence that the researcher is acquainted with the already known facts. The review of related literature enable the researcher to define the limits of her field or area
of research. It helps the researcher to avoid unfruitful, useless problem areas and unintentional duplication of well established findings. Survey of related literature being an important aspect of research project means to locate, to read and evaluate the past as well as current literature. It acts as a light house to discover what is already known, what are the pitfalls of the previous studies are and also widens our outlook, knowledge, insight and experience with regard to the subject. For the present study the researcher has reviewed the research reports of researchers and institutions, journals, magazines, newspapers, brochures, books, reference books, publications of MHRD of Govt. of India, survey of educational research and the related websites etc.

The review of the research literature related to the proposed study entitled, “An Evaluative Study of Mid-Day Meal Scheme in Bathinda District of Punjab” has been done rigorously, which has been presented in the following paragraphs:

Devdas & Radharukmani (1966) conducted a study of school lunch programme and found that the average weight gains and increase in heights of the children in the school lunch group were greater than those of the control group during the experimental period. The percentage hemoglobin level and the RBC count of the school lunch group were higher than that of control group. Children participating in the school lunch programme also showed greater social development. Programme also helped in increasing attendance and performance at school.

NCERT (1982) undertook a national level study to find out the impact of Mid-Day Meal Programme on school enrolment and retention of primary children and found that all the 13 states which were implementing Co-operative of American Relief Everywhere (CARE) supported Mid-Day Meal Programme were covered in the study namely Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh,
Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu. Kerala was excluded because of non-availability of data. Thus 12 states were covered. (i) Some states had their own Mid-Day Meal Programmes, apart from Co-operative of American Relief Everywhere supported Programmes, while other had only Co-operative of American Relief Everywhere Mid-Day Meal Programme. While in District level and Block level studies, percentage of beneficiaries was seen to be inversely related to Total Enrolment Rate, there was evidence that Mid-Day Meal Programme helped in bringing more children to schools. (ii) Higher Total Retention Rate was not noticed in respect of districts with Mid-Day Meal Programme than those without them. Total Retention Rate were, however, higher for Districts having higher values of Percentage of Beneficiaries. (iii) Study in Haryana provided strong indications in support of the impact of Mid-Day Meal Programme on Total Retention Rate. Total retention Rate mean of Mid-Day Meal blocks was higher than that of non-Mid-Day Meal blocks.(iv) Retention Rate of Girls means of Mid-Day Meal districts were higher than that for non-Mid-Day Meal districts.(v) Impact of Mid-Day Meal Programme was not evidenced.

Acharya (1984) conducted a study to evaluate the impact of the compulsory primary education policy in Andhra Pradesh and found that to provide education to all the children of 6 to 14 years of age; the Mid-Day Meal Programme had become a boon to the poor children of the area. It helped to a considerable extent in the increase of enrolment and retention of students of weaker sections in schools.

Krishnamurthy (1985) conducted a study on the position of enrolment of children in the age group of 6-13 years and problems involved in their enrolment and found that measures taken for enrolment of children including visiting to houses of non-
enrolled children, serving Mid-Day Meals, supply of uniforms and text books and cash grants to STs had significant effect.

Saxena and Mittal (1985) conducted a study on the impact of Mid-Day Meals Programme on enrolment and retention at the primary stage and found higher total enrolment rate (ERT) in MDM districts than Non-MDM districts. Enrolment rate for girls (ERG) was also higher in MDM districts even after eliminating the effect of social, economic and educational factors. Block level study in Haryana also indicated a higher Total Retention Rate (TRR) in MDM blocks. Moreover, block level study in Haryana and Karnataka states did not provide evidence for influence of the MDM programme on retention rate.

Sachidananda (1989) in an experimental study found that poverty of the families, particularly of rural folk and therefore, the need for engaging children in domestic or non-domestic labour, were principally the root cause of non-enrolment, non-attendance, drop-out and stagnation.

Pollitt (1990) recorded the following conclusions, based on a review of studies on relationship between nutrition and education to bring home that nutrition was important determinant of educational performance and potent resource to decrease educational wastage: (i) Iron deficiency/anemia among school students represents an impediment to learning and likely to affect the level of alertness of children, which in turn affects attention and learning. (ii) Among well-nourished children a nineteen to twenty hour fasting period affects attention, and the capacity to solve problems of visual perceptual organization. There was also suggestive evidence from evaluations of school feeding programme in developed countries that not taking breakfast affected performance in reading and arithmetic test.(iii) There was strong suggestive evidence that school
feeding programmes in developing countries result in an increased attendance among recipients. There was no conclusive information from developing countries that school feeding programmes (breakfast or lunch) had specific educational benefits, such as improvements in achievement measures or higher concentration.

Laxmaiah, Sharma and Rameshwar (1991) conducted a study on the impact of Mid-Day Meal Programme on education and nutritional status of school children in Karnataka. The survey was conducted on total 2694 children (MDM-1361, non MDM-1333) from 60 schools. The result of the study indicated better enrolment and attendance, higher retention rate, with reduced dropout rate, a marginally higher scholastic performance and marginally higher growth performance of (MDM) children.

National Institution of Nutrition, Hyderabad (1991) in its annual report reported that average intake of energy and protein by children between 7 to 10 years was 1170 calories and 30 grams respectively, while in 10 to 13 years age group it was 1400 calories and 37 grams respectively. Analysis of anthropometric and clinical data of the study showed that nutritional status of the children in Mid-Day Meal School was relatively better than compared to the children in non Mid-Day Meal School. According to the study, the comparison of retention rates and the dropout rates also showed favorable status in Mid-Day Meal schools. The results of the study indicate that the programme was not without benefit. It had immense potential to improve the nutritional as well as the educational status of children.

Rajan and Kumar (1992) conducted an exploratory study on the impact of the Chief Ministers’ Nutritious Noon-Meal Programme on the enrollment, attendance and dropout rates of primary students in 17 schools (11 percent of total) in Negercoil District of Kanyakumari. Comparison was made between annual growth rate in these
indicators before (1972-82) and after (1983-89) the start of the programme. The findings of the study showed that Mid-Day Meal Scheme had brought down the dropout rate from 40 percent to 22 percent. The caste wise analysis showed that the scheme had a great impact on enrolment of backward classes and Muslim communities than other communities under investigation. The programme’s apparently negative impact on enrolment was likely the result of both drought and a demographic shift in the periods examined; for both the 1981 and 1991 census, Negercoil registered lower population growth and fertility rates then the state average. In 1979-82 enrollment rate was 0.25, average attendance rate was -0.11 and dropout rate was -1.8. And in 1983-89 enrollment rate was -0.13, average attendance rate was 0.37 and dropout rate was -6.4.

Tara Consultancy Services (1994) after the evaluation of improved Mid Day Meal Scheme in Gujarat found that the MDMP officials opined that most of the children suffered from worms and nutritional deficiencies. They were on an average 1.1 kg heavier and 1.1 cm taller than undosed children. Hemoglobin values on an average were 1.8 g Hb/dl more than before. Average Hb levels were 12.4 g Hb/dl in the ‘After’ situation. An excellent reduction in intestinal parasitic infections was achieved from 71% to 39%. Greatly reduced the prevalence of night-blindness and eye signs of vitamin A deficiency i.e from 67% to 34%. Many dosed children stated they felt more active and could see better in dim light.

Levinger (1995) in his article school feeding programmes: myth and potential, based on a review of literature and assessment of empirical evidence reported that (i) school feeding programme in Haiti, covering 100 schools, and 1936 primary school children was studied. It was noted that there was strong correlation between home environment and attendance in both school feeding programme and non- school feeding
programme schools. (ii) Comparison was made between fed and non-fed schools under fifteen programmes in Columbia, Kenya and the Philippines. School feeding programme was found to be effective on attendance in three programmes. In ten programmes, School feeding programme was considered probably effective on attendance. School feeding programmes were more effective in stable, poorer, rural areas, population on the border-line of their development scale, poorer people amongst those who were about to send children to school are especially likely to benefit. (iv) Impact of any School feeding programmes was a function of the interaction between the environment in which it operates and the features incorporated into its design. (v) School-aged child’s nutritional status exerts significant influence on his academic performance, current diet was the single most significant predicator of class-room achievement, hunger cause inattentiveness, distractibility and school feeding programmes that were successful either in reducing a child’s feeling of hunger or improving his nutritional status were likely to facilitate cognitive development.

Sharma and Sharma (1995) conducted a study on effect of nutrient supplementation on cognitive development of pre-school children and found that (i) nutrient supplement had positive effect on both the groups “deficient intake” group and “adequate intake” group. The effect was more profound in the deficient group children. (ii) The dietary diaries of both the children adequate and deficient groups showed that their diet was found to be deficient both in the vitamins and minerals. However, clinical symptoms deficiencies were not visible in these. (iii) The clinical symptoms of nutrient deficiency appear only after a very serious deprivation for long time. The marginal intake could cause the sub-clinical deficiencies that affect the biochemical functions of central nervous systems and this could also be associated with proper performance or
cognitive activities. (iv) Supplement had positive effect on both the groups. The effect was more pronounced in the deficient group children.

Jeyapaul (1996) in his article stated that nutritional support to primary education was a landmark to tackle the problem of malnutrition among the children. Many states/union territories had already implemented noon meal scheme in schools. The Noon Meal Scheme of Tamil Nadu was claimed to be a harbinger of a new social order by helping to establish a casteless harmonious society. On the employment front, the Tamil Nadu Noon Meal Scheme was claimed as the single largest employment programme for the rural areas with more than 1.6 lakh of people (mostly women) employed as organizers, cooks and helper.

Yojana (1996) reproduced the PM’s letter in which PM stated that in the first phase, primary school children, studying in class 1 to 5, in the 2446 blocks where the revamped Public Distribution System is functioning has been provided food grains at the rate of 100 grams per child per day. In this way, 3 kilograms of food grains every month has been provided to every child. He sincerely hoped that Panchayats would make provisions for providing cooked food to the children with the food grains made available to them from the central government, in cooperation with the local NGOs, parent-teacher committees, DWCRA groups and other such organizations. Panchayats have to make this scheme successful in their respective primary schools. This scheme has been extended to the rest of the country in the coming two years.

Arya (1997) in her study of the implementation of the School Nutrition Programme in Municipal Corporation Primary Schools of East Delhi found that Municipal Corporation, School Welfare Department, and Education Department were implementing the scheme in all their respective schools, Alpahaar was distributed
before the school lunch on all the working days comprising of any of five items: 4 pieces of milk bread, 4 pieces of fruit bread, 10.67 grams high protein biscuits, 55.6 grams glucose biscuits and rusks. Three more items, ground nuts, ready to eat food (salted) and extruded and roasted black grams were also distributed under the scheme. It was also found that 74% of the teachers opined that food items of absentee children might be utilized as incentive to encourage the weak children. It was also found that School Nutrition Programme had made improvements in the children.

Nogas (1998) conducted a study to find the impact of Mid-Day Meal Programme among scheduled tribe students of primary schools in Danta Taluka in Gujarat and found that 96% parents did not complaint against the Mid-Day Meal Scheme. 56% parents were not aware of Mid-Day Meal Scheme. 43% parents said that the health of their children became better with the Mid-Day Meal Scheme. 69% parents said that the quantity of meal was not enough for their children. Only 38% parents were ready to send their children to school if Mid-Day Meal was not implemented. 80% head teachers were of the view that enrolment had increased because of Mid-Day Meal Scheme. According to 50% of the head teachers Mid-Day Meal Scheme was only for the economically backward and for the poor children. 80% head teachers said that they got edible food grains regularly for Mid-Day Meal Scheme. 70% head teachers were of the view that with the implementation of the Mid-Day Meal Scheme more and more children got enrolled. 40% organisers were involved in the social work besides Mid-Day Meal Scheme. 100% organisers informed that most of the children of the school take benefit of the Mid-Day Meal Scheme. 30% organisers informed that they do get their pay regularly. 20% organisers said that there was a bias between the ST children and other community children.
Public Report On Basic Education (PROBE) (1999) stated that the Mid-Day Meals to be effective in promoting enrolment as it provided incentive in the form of a subsidy, and an attraction to children in the form of free meal. It helped to improve the nutritional status of children, socialize them and help them to shed class inhibitions. The team felt dry rations (food grains) encouraged enrolment rather than attendance, they are however worthless in terms of socialization and nutrition.

Rajivan (2001) studied the nutritional impact of (actual and potential) Mid day meals programme in India. He found that to combat the problem of ‘Goitre’ prevailing in the districts of the Nilgiris, Coimbatore, Saleme, Trichy, double fortified salt with iron and iodine was introduced in mid day meals from April 1996 onwards. Eggs as a nutritive intake were introduced in the menu from 1989. Children who did not eat eggs were given a portion of sathu food. Over the past nine years the states budgetary commitment to nutrition had increased significantly in absolute terms.

Centre for Equity Studies (2002) conducted a survey to reveal the state of Mid-Day Meals in India, an extreme example was found in Bahmu (Bilaspur) district of Madhya Pradesh. There the Mid-Day Meal was prepared in a soot-covered classroom, using a makeshift stove next to the swarming pupils. The cook struggled with inadequate utensils and took help from young children for cutting the vegetables. According to the teacher, no teaching took place after lunch as the classroom turned filthy.

Centre for Equity Studies (2002) studied of 81 schools in the states of Chhattisgarh, Rajasthan and Karnataka where free Mid-Day Meal was introduced in July 2001. The results indicated that class I enrolment rose by 15% within the year, particularly impressive jumps were made in female enrolment in Chhattisgarh (17%)
and Rajasthan (29%). Parents also reported that attendance had improved because children were now keen to go to the school.

Khera (2002) conducted a survey on Mid-Day Meal in Rajasthan and found that the new Mid-Day Meal Scheme had been internalized quite quickly by all concerned—children, teachers, parents and the administration. The beneficial aspects, such as higher school attendance, seem to be emerging quite clearly. Caste based discrimination was reported in two of the 63 schools that were visited. In some places supplies were irregular or inadequate. Appointment of cooks had ensured that the preparation of the Mid-Day Meal did not interfere with classroom activity.

Dreze and Goyal (2003) in their study on future of Mid-Day Meals found that there was 14.5 percent increase in total enrolment in class one in Chattisgarh, Rajasthan and Karnataka between 2001-2002 and 2002-2003 after introduction of mid-day meals in schools. They also noted instance of active parental resistance to the appointment of dalit cooks. They also noticed discrimination against dalit children. But Mid-Day Meals made it easier for teachers to retain pupils after the lunch break.

Dreze and Vivek (2003) in their article ‘Hunger in the Classroom’ stated that as ten months had passed since the Supreme Court directed the state government to introduce cooked Mid-Day Meal in all primary schools within six months. Some state governments were implementing the order’ but many others were trying to buy time, plead for central government funding, or even reverse the order. The Supreme Court seemed determined to enforce the order, but public pressure had also an important role to play in overcoming these hesitations. In states that had started providing mid day meals, various implementation problems had arisen. There had been occasional report of food poisoning, notably in Pondicherry where hundreds of children fell ill after
consuming the Mid-Day Meals. Teachers often complained that Mid-Day Meals encroaches on their time or disrupt classroom processes. And in some states, high-caste parents had objected to the idea of an all-caste lunch, or to the Mid-Day Meals being prepared by a dalit cook. It is, however, important to avoid a loss of nerve in the face of these teething problems. Consider for instance the issue of food poisoning, occasional incidents of indigestion at school carried little weight against the enormous health gains (present and future) that may be expected from higher school attendance and reduced hunger in classroom. Similarly, the much-cited problem of encroachment on teacher time was far from insurmountable. The more enterprising states had already appointed helpers to cook and serve the Mid-Day Meals, the provision of pre-cooked food could also help to avoid disruption of classroom processes. Further, it was important to remember that one of the biggest disruption of absence of mid day meal. Children went home for lunch and many of them did not come back. As far as caste conflict were concerned, it was a positive feature of Mid-Day Meals that they challenge traditional caste prejudices and teach children to share a common meal irrespective of caste. On 28 November 2001, whole some state government argued in the Supreme Court that Mid-Day Meals were unaffordable, the bench seemedly told them to “cut the flab somewhere else”. As pointed out by Dr. John Kurian of the planning Commission, in many states even a moderate surcharge on liquor taxes would be quite enough to find a Mid-Day Meal Programme.

Garg (2003) reported that the Mid-Day Meal Scheme of government in Bathinda and adjoining districts was discontinued due to lack of funds. Private contractors responsible for cooking & distribution of food stopped the supply as they were yet to be paid Rs. 48 lakh by the district administration. It was also reported by Tribune News
Service (2 Dec. 2003) that the Mid-Day Meal Scheme, which was launched in various pockets of the state by the Punjab Govt. on October 17, 2002, was discontinued in Bathinda district in the first week of September, 2003, after the authorities failed to make payments to the contractors.

Pratap (2003) reported that in 1982, when Tamil Nadu’s legendary chief minister M.G. Ramacandaran (MGR) launched his Free Mid-Day Meal Scheme for school children (it cost the state 200 crore), he was initially scorned and attacked. Journalists including him (Partap) criticized MGR for being a vote-populist. Since MGR did not bother to answer the press. He just went ahead and implemented it. As a child, MGR knew what it was to go to bed hungry. It was a terrible experience that he wanted to share with the children of his state. Within weeks, he (Partap) wrote an article praising the Mid-Day Meals. Amazingly, not only were meals being provided daily, the programme had many spinoffs. Teachers said school attendance had risen dramatically. So, not only would Tamil Nadu’s children be healthier; more would be educated. But as soon as word spread about the success of the Mid-Day Meal Scheme, which sent MGR’s popularity sky rocketing his opponents got active. Suddenly, children in several schools suffered from food poisoning. Having been impressed with the level of hygiene, while reporting the earlier story, he felt something fishy. He investigated and published his discovery. MGR’s opponents were dropping dead lizards into the Sambar to destroy his popular scheme. But public outrage and greater state vigilance quickly crushed the dirty tricks. Since then Tamil Nadu’s Mid-Day Meal Scheme had been a shining example and 15 years after his death, MGR was vindicated when in 2001 the Supreme Court directed all states to implement this scheme. As Centre of Equity Studies had shown how vital it was to make the free meal scheme national priority. Just as female
literacy had many other far reaching side-benefits such as improving hygiene and ensuring lower birth rate, feeding our poor children had served vital spinoffs, as that surely pointed out.

Singh (2003) reported that food continued to be a major factor not in the development of the whole person rather the personality throughout growing years and day started with breakfast, which was increasingly being considered the most important meal of the day, especially, for breakfast shunning children below the age of 12. The figures given by him showed an alarming phenomenon that an estimated 10% of them missed the breakfast in 1961 and by 1991 about 14.91% children had started skipping the breakfast. Everybody, especially, primary school students i.e. pre-adolescent students required nutrients and energy for concentration on their ever-increasing tasks.

Vermeersch (2003) conducted a study to estimate the impact of government subsidized school meals on educational achievement and school competition in Western Kenya and found that the programme increased the participation of both children who were previously enrolled and children who would not have gone to school in the absence of the program. But there was no impact on cognitive abilities or on the children’s height or weight. The programme had increased the finances of the preschools. As after the start of programme, funds rose through school fees paid by the parents increased by approximately 60 percent in comparison to other schools.

Walia (2003) stated that after having worked for three to four hours, pupils require something to eat, therefore they reach to street vendors which is harmful for their health. It is therefore, necessary to provide meals to children in schools. Mid-Day Meals helps in improving the health and physical development of child. Mid-Day Meals help the students to make quicker and sounder progress in studies.
Madhu and Dogra (2004) in their article Reforming the Mid-Day Meal Programme stated that the scheme of mid day meal was very important means of improving nutrition of the children and at the same time making schools more attractive for children. However some problems had reduced the attractiveness and acceptability of the scheme. Some reports suggested that cooking of Mid-Day Meal created disturbance in the teaching work to some extent. In addition several instances had been reported of poor quality food being distributed and of children falling ill after eating contaminated food. To avoid these problems the following improved version of the scheme was suggested. (1) The food should be (a) Dry (b) Preservable for two or three days without adding chemical preservatives (c) High in nutrition (d) and Not too expensive. (2) That dry ration should be given to children twice a day, first at the start of the day. That would help those students who had not eaten breakfast. The second meal should be given during the normal lunch break in school. (3) The work of preparing the whole flour biscuits (or other food items) should be given to self help group or cooperatives of women from weaker sections. Those women should include a good percentage of dalit women at the panchayat level. (4)Whenever possible grain and other raw materials should be purchased from the local farmers and provided to self help groups. First preference should be given to organically grown grains, wherever that was available. (5) Several schools had open space inside or near the school. While some of this space had to be kept as play ground, wherever extra space was available that should be used to grow fruits and those vegetables which could be eaten raw. The produce of those school gardens should be meant entirely for school children. That could be added to their normal Mid-Day Meals.
Parikh and Yasmeen (2004) reported that given the proven efficacy of the Mid-Day Meal Scheme in improving school enrolment and attendance in a society in which an estimated 59 million children in the age-group 6 to 14 were out of school, it was shocking that only half of India’s 31 states provided cooked Mid-Day Meals in schools within their administrative borders, seven states with an aggregate population of 400 million did not provide a cooked meal despite supreme court’s judgment of 2001. Though lack of budget and financial resources was the standard excuse of recalcitrant state governments, the consensus of informed opinion was that, it was the lack of political, bureaucratic and societal will which had delayed and hamstrung the implementation of the free mid-day meal for school children.

Rajivan (2004) reported that while initially feeding programmes may had been started to combat hunger in a visible, center based fashion, over the years the government in Tamil Nadu had made serious attempts to combine provision of food under the Noon Meal Program (NMP) with services like health care, immunization, growth monitoring, pre and post natal care for women, communication and nutrition education. In 2001-2002, taking all preschool as well as school centers together, in all there were nearly 71,721 noon meal program centers feeding over 77.25 lakhs children and 5.23 lakh adults. ICDS and Tamil Nadu Integrated Nutrition Project (TINP), were integrated with the noon meal program, infrastructure for pre schoolers. By 1989 TINP-I operated in 173 rural blocks. Its successor, TINP-II expanded coverage to 316 blocks, eventually with 18,352 centres. During the World Bank (WB) ICDS-III project 30,445 preschool non meal centres, 13,98,068 children and 5,35 502 adults. The pure NMP centers (non-TINP, non-ICDS) operated in a few urban pockets (718 centers with around 29,3457 children). There were 41057 total NMP school centers in rural and
urban areas covering around 64,60,223 school children. By TINP-I total expenditure was Rs. 433.69 crores and assistance was Rs. 451.75 crore. During WB ICDS-III project expenditure was Rs. 18.85 crore till 2001-02 and World Bank allotted Rs. 86.95 crore for the project.

Sood and Kumar (2004) conducted a survey with the objective to assess the implementation status of Mid-Day Meal in East Champaran and Supaul districts in Bihar and found that in Champaran 66 percent of the schools and in Supaul none of the schools visited were adhering to the scheme. Non-allocation of rice from the block office to the schools emerged as one of the major problems of Mid-Day Meal Scheme. In most of the schools, Mid-Day Meal was cooked under thatched roof. None of the schools had a separate storage room. Monitoring was nonexistent in the schools surveyed. Only one school in each district had been once inspected. In Chakla village, parents complained about poor quality of food.

Sinha (2004) stated that the programme attracted criticism as it invited wastage; inefficiency and corruption wherein the amounts allocated in the name of maintenance of the programme at Rs. 1.25 per child per day could be manipulated locally. In spite of such enormous difficulties in reaching out to the students the value of Mid-Day Meal Scheme could not be understated. There are indications through studies that there was a correlation between the Mid-Day Meal Programme and enrollment of children, especially that of girls in schools. Schools were becoming spaces for harmonizing relations among the communities. The programme also was an attempt to respond to the appalling conditions of health and food of millions of children in this country.

Swaminathan, Jeyarajan, Sreenivasan and Jayashree (2004) in their study on Tamil Nadu’s Mid-Day Meal Scheme found that Tamil Nadu’s Noon-cum Nutritive
Meal Scheme was the country’s largest in terms of the number of beneficiaries covered. The enrolment and retention of children (Including that of girl children) in schools had shown significant improvements. The dropout rates among primary schools had come down. Considerable research had been done to make the composition of meals nutritious, cost effective and locally rooted. Scheme was financially sustainable even while the emphasis needed to shift to a more careful analysis of the heads of expenditure of the scheme. The scheme was also a large employer, particularly of women.

The Indian Express (July 20, 2004) reported that 90 children were burned to death in a fire that started in the kitchen of Saraswati Elemenrany School in Kumbakonam as the staff was preparing the Mid-Day Meals. The incident prompted state governments all over the country to review the ambitious Mid-Day Meal Scheme. The incident raised doubts over the viability and safety of serving cooked Mid-Day Meals in schools. The Tamil Nadu Government ordered all the schools with kitchen having thatched roof to dismantle their structure and replace them with non flammable.

The Tribune (2004) reported that the Mid-Day Meal Scheme for primary school children in the Kangra had run into rough weather because of ‘mismanagement’ in the department resulting in delay in the disbursement of the grants from the scheme to the teachers facing them to borrow goods from the market at their own level. Things had become so bad that depot holders had refused to provide schools Kerosene and consumable items resulting in the disruption of regular Mid-Day Meals in some schools. The government had provided adequate budgetary provisions for the scheme. There were 1755 primary schools in 19 educational blocks of the district and 1,13,972 children were provided Mid-Day Meals in these schools in the past three months. The state
government had sanctioned Rs.98,97,786 as a first installment and Rs.98,55,671 as a second installment for Kangra district under different heads for the scheme but delay in the disbursement of the funds at the level to the teachers was pushing the programme to the back. A senior officer of the Deputy Directors of Education’s office said that at the block-level things were going on smoothly. The central head teacher said the alleged inefficiency at the central head teacher-level was affecting the scheme. Because of the hue and cry raised by teachers the local Block Education Office woke up and decided to withdraw Rs.3.75 lakh for the disbursement among teachers for the mid-day meal scheme.

Afridi (2005) conducted a study to compare the financial and institutional organisation of the Mid-Day Meals Programme in Madhya Pradesh and Karnataka states and found that in every state there should be separate fund for effectively implementing the scheme. Panchayats were spending less than officially mandated expenditure in the surveyed areas in Madhya Pradesh. The quality of the daliya served to the children was extremely poor in the surveyed areas. In addition the quantity of the meal was also small. Of all the schools surveyed, not one had a separate kitchen or a shed for cooking. Panchayats had provided eating utensils but they were not enough for all the students. More than 60% of the respondents were satisfied with daliya while the positive response for the Suruchi programme was as higher as 80%. Varied menu performs much better in terms of meeting the Recommended Daily Allowance (RDA) than the daily meal. The Suruchi Bhojan Programme, which provided for a varied menu, met close to a fifth (22 percent) of a child’s RDA in terms of calories, dalia met on 11 percent of a child RDA, in terms of actual intake. She also found that 6% of parents stated “Intermingling of castes” as a reason for being dissatisfied with MDMS,
whereas no parent cited this as a reason of dissatisfaction where the Suruchi Bhojan was being served.

Bhattacharya (2005) conducted a study on elementary education in Chhattisgarh and found that state Govt. had taken initiatives for physical facilities that included availability of building, classrooms, toilets, drinking water, black boards, uniforms, text books and stationary for students, because school performance had been found effected due to lack of these facilities. Even after this there had been a deficit in the attendance since the students seemed to take least interest in academics. The parents also were inclined more for earning by one source or the other rather than their wards got educated.

Blue (2005) conducted a study on the government primary school Mid-Day Meal Scheme to assess the programme implementation and impact in Udaipur district of Rajasthan and found that seven out of the eight studied schools had hired a cook to prepare the Mid-Day Meal. In the six schools, children and teachers did not help with meal preparation. Teachers in six out of the eight schools visited by the investigator reported no disruption at all to classroom activities. Cooks considered the job a welcome way to make extra money, but were dissatisfied with meager salary. The amount of funding per student and levels of spending on cooks salaries and additional food ingredients varied widely from school to school. The researcher observed the amount of food being distributed appeared between 40 and 70 grams. 84% children said that the school meals filled them up and remaining said that they were still hungry afterward. Teachers reported increase in enrollment and daily attendance due to Mid-Day meals.
Chuaungo and Zohmingliani (2005) in their study on elementary education in Mizoram found that the state, under SSA had the provision of mid-day meal for children enrolled in Govt. managed elementary schools. Village Education Committees (VEC) and Parent-Teacher Associations (PTA) were given the power and responsibility in the matter of mid-day meal. The practice was that 2kg. of rice per week was distributed to each child. There had been improvement in total enrolment in primary schools except in 2003-04. Growth percentage among the girls was higher than the total growth percentage.

De, Noronha and Samson (2005) conducted a study on Delhi’s Mid-Day Meal Scheme and found that serving the meal was fairly a smooth procedure. The distributer sent his own people, ranging from one to three persons to serve the meal. The entire process of serving and eating was generally done within half an hour. The quality of the meal was found to be sound for the most part with almost all items on the menu meeting the enthusiastic approval of the children. In terms of nutritive value, the food provided was supposed to satisfy a minimum in terms of calories and protein. In some schools inadequate infrastructure and poor usage of existing facilities aggravated the problem of poor hygiene.

Jain and Shah (2005) conducted a survey in 70 most backward villages of Madhya Pradesh and found that (i) 90% of the teachers and cooks said that the meal was provided regularly. (ii) 96% of the parents felt that the scheme should continue. They also felt that it had ended classroom hunger.(iii) 63% of the parents felt that meal had positively affected the learning abilities of school children and 74% of the teachers said that it had positively affected the students.(iv) Overall there was a 15% increase in enrolment. Moreover the increase was marked in the case of SC and ST children (43).
The rise in the enrolment of girls was 38%, out of this the enrolment of SC and ST girls was 41%. (v) While 60% of the parents felt that the meal was good or very good, only 10% felt that the meal was not satisfactory. However there were inter-regional variations.(vi) In Tikamgarh, 45% of the parents felt that meal was bad.

Lourdes (2005) conducted a study on the elementary education in Tamil Nadu and found that in Tamil Nadu to achieve the target of Universal Elementary Education (UEE) in the year 1982 Puratchi Thalaivar M.G.R. Nutritious Noon Meal Scheme was introduced. From the year 1985-86, the scheme of free supply of uniform to the noon-meal beneficiaries in standards 1-8 was implemented. From the year 1986 onwards, free textbooks were supplied to all children from standard 1to5 and children covered under Noon Meal scheme in respect of 6 to 8 standards.

Mathur (2005) made a situation analysis of Mid-Day Meal Programme in Rajasthan and found that (i) introduction of menu based Mid-Day Meals had positively impacted enrolment and daily attendance of children. (a) 75% teachers said that Mid-Day Meals had boosted enrolment. (b) 85% teachers said that mid-day meal had enhanced school attendance. (ii) Cooked Mid-Day Meals had reduced classroom hunger especially those belonging to underprivileged sections. (iii) Cooked Mid-Day Meals had also contributed to the cause of social equity as children, cutting across caste and class lines sat together to share together a common meal. (iv) Mid-Day Meals had contributed to the cause of gender equity by providing employment opportunity to women and also by liberating of poor working mothers as they could leave early for work. (v) 67% of the parents interviewed, felt that the quality of Mid-Day Meals was satisfactory. (vi) 85% parents felt that the scheme should continue.
Naik (2005) in his report on Akshara Dasoha Scheme of Karnataka stated that (i) there was a sharp rise in enrolment particularly in rural areas. (ii) The programme had made positive impact on teacher absenteeism. 64% of schools felt that there had been a reduction. (iii) Mid-Day Meals was served regularly. (iv) Schools supplied de-worming tablets and vitamins and iron tablets. (v) No discrimination was found with respect to serving and eating food on the basis of caste etc. (vi) 72% of the parents felt that their children had gained weight because of Mid-Day Meals.(vii) 59% of the parents felt that their children suffered less from common ailments like cold and cough.(viii) More than 90% of parents were satisfied with the scheme.(ix) 95.5% of the children felt that the food was tasty and 90% of them said that drinking water was available. (x) 95% of the children felt that their concentration had improved.

Paul (2005) studied the elementary education in the Meghalaya and found that the dropout rate was more among the girls than among the boys. Among the North East states, Meghalaya topped with 64 percent dropout among girls. Both economic and non-economic factors were responsible for such dropout. The Sarva Shiksha Abhiyan (SSA) to universalize elementary education system might take care of the problems associated with primary and upper primary schools. However in spite of all the efforts, universal primary education still reminds a cry. For that one solution could be incentives like Mid-Day Meals, free text books and implementation of attendance scholarships.

Rath (2005) conducted a study on elementary education in Andaman & Nicobar Island and she found that the administration was making all out efforts to increase enrolment and retention at school. The incentives provided to all the tribal students and students belonging to Below Poverty Line (BPL) families were provided free text books, free uniforms, cooked Mid-Day Meals, snacks to the students of pre-primary
classes, stipends to hostlers etc. The children, who belonged to the disadvantaged families, migrated labourers, working children and specially the girl children were under special focus of Mid-Day Meal provided to all children in primary classes by drawing free rice under the central scheme of National Programme of Nutritional Support to Primary Education (NPNSPE). Total number of children benefited was 35,179. Supervision of Mid-Day Meal Programme was entrusted to PRI members.

Rana, Santra, Banerjee, Mukherjee and Kundu, (2005) conducted a study on cooked Mid-Day Meal Programme in Birbhum district in West Bengal and found that the attendance rate in the MDM providing schools was increased by more than 10 percent while the rate remained almost constant in the case of non MDM providing schools. The impact on the attendance was much among SC, ST and Muslim children as well as ST girl students. More than 80 percent of the parents wanted the programme to continue. 88 percent children were in favour of continuing the programme. About 73 percent teachers found some positive impact of the programme. Mainly in connection with increase in attendance of children, majority of teachers wanted the programme to continue. The programme was found to have suffered from the problems of poor quality of food, inadequate infrastructure, very low salary of cooks, insufficient budget allocation, caste and religion base and less scope for parents’ participation etc.

Thorat and Lee (2005) in their article ‘Caste Discrimination and Food Security Programmes’ stated that Mid-Day Meal Scheme had been implemented in 89.4 per cent of villages surveyed in Rajasthan, Andhra Pradesh and Tamil Nadu. Children at government schools in these states were provided daily with hot, cooked, Mid-Day Meals, free of cost. Meanwhile, Uttar Pradesh and Bihar, on the other hand, had not implemented the Mid-Day Meal Scheme but continued with a programme in which a
fixed quantity of dry grain was provided to government school children. Rajasthan and Tamil Nadu had very low percentage of villages: 12 percent and 19 percent respectively, in which the Mid-Day Meal Scheme was held in a locality non-threatening to dalits (i.e., dalit colony). 52 per cent of respondent villages from Rajasthan, 24 percent from Andhra Pradesh, and 36 per cent from Tamil Nadu reported that there was problem of caste discrimination in the MDMS in their village. 9.2 per cent of respondent villages reported that teachers discriminate among students by giving inferior or insufficient food to dalit children. In Bihar, plates were tabled with the initial of the child’s caste. In Rajasthan children from “lower” castes were not allowed to take water directly themselves, but given by other children.

Bhattacharyya (2006) conducted a study on Mid-Day Meal Programme with special reference to Nalbari and Golpara, Districts of Assam, and found that according to District Information for System Education (DISE) data of 2002-03 the number of primary schools in Nalbari district was 209 and total number of students both boys and girls were 12994. Later after the implementation of Mid-Day Meal Scheme the number of schools increased up to 246 and the enrolment also rose up to 10326 according to DISE 2004-05. The same case was visible in upper primary schools. According to DISE 2002-03 the number of SC students both boys and girls were 1425 which increased to 1464 in the year 2004-05. Almost all the schools have kitchen sheds for preparation of Mid-Day Meals. Before implementation of Mid-Day Meal Programme enrolment was 22213 but after implementation of the scheme it raised up to 31734 according to DISE 2005. But in case of Balijana block of Goalpara district the findings were little different compared to Pachim Nalbari block. Not only the Education Officers, President and Secretary of Goan Panchayat, Headmaster, Assistant teachers and almost all the
guardian and other local people were highly satisfied as had ably relieved the starvation. Students were highly appeased with the cooked meal. There was active participation of local people particularly the matrigotes in preparing, serving and cleaning the whole process in the school was noteworthy which was not visible in Pachim Nalbari block. Mothers had been coming voluntarily batch wise to prepare the meals and serve them among children there after clean the utensils and school complex.

Gangadharan (2006) conducted a study on Noon Meal Scheme in Kerala and found that average Noon Meal Schools enrolment rate was as high as 85-95%. There was no intercommunity difference. 10-15% students attended schools only because of noon meal scheme. School attendance had improved considerably in certain areas proving that when quality was high, enrolment rate was also very high. Provision for procurement and storage were lacking in schools and the system was being managed in an ad-hoc manner, the sustainability of these structures were doubtful.

Gopaldas (2006) found that more than 100 million school-going children were receiving a hot cooked lunch for 200 days in the year. There was also possibility that children aged three to six, presently covered under ICDS, would be integrated in the primary school system and the Mid-Day Meal Programme. As things stand, Mid-Day Meals address the “raw hunger” problem, but fail to address “hidden hunger” in most states

Hasan (2006) in his study of the implementation of the Mid-Day Meal Programme in Swar Tehsil of Rampur district in Uttar Pradesh found that according to the perception of all the teachers lunch break was the appropriate time for distributing the Mid-Day Meals. 70% of the teachers opined that only head teachers should distribute meal at a fixed time to keep an eye on the quality of meals. Whereas 80% of the
teachers perceived that the Mid-Day Meal Programme had proved to be helpful in attainment of minimum level of learning. While 90% of the parents were in favour of continuing Mid-Day Meal Programme, but only 50% parents were satisfied with the quality of food served to the students, 80% of the parents were in favour of distribution of Mid-Day Meals to all the students irrespective of their caste, sex and socio-economic status, whereas 20% of the parents were of the opinion that it should be given to only SC/ST and economically backward children.

Kaur (2006) conducted a study on the impact of Mid-Day Meals on enrolment, retention, and achievement of primary school students in Patiala district. And found that there was no significant difference in the attendance of students. It had come to light that there had been a decrease in enrollment of thirty students in the year 2005-2006 and increase of eleven students in the year 2006-2007. The entire process took a lot of time in certain schools where strength of students was quite colossal as a result of which the school authorities allowed the recess to continue well beyond the allotted time. Many of the children were unable to satisfy their hunger. Most of the schools expressed their grievances for the low quality food. Teachers were resented for the fact that the quality of the food was not at all good as they were the ones who tasted the food before serving. Less than half of the parents appreciated the quality of food. Many of the parents eulogized Mid-Day Meal as they sent their children to school just because of this scheme. There had been found no improvement in the nutritional level of students due to poor management and low quality food.

Khera (2006) found in her study that Mid-Day Meal Scheme had a greater impact on enrolment of children from disadvantaged families i.e. dalits, schedule tribes and the poor. Poor working mothers were happy with the programme as it made them free from
burden of feeding children during the day. Mid-day meals also made an important contribution to the reduction of gender bias in school.

Kumar and Rani (2006) conducted a study on Mid-Day Meal Scheme in Pondurthy Mandal of Vishakhapatnam District of Andhra Pradesh and found that a majority of the heads of the schools (68.6%) opined that there was a considerable increase in the enrolment of the children in the schools after the introduction of Mid Day Meal Scheme. Further data revealed that there was regular attendance of pupils (91.4%). The quantity of food served to the children was sufficient. As regards the quality of food more than half of the respondents opined that it was good and the rest stated that the quality of food needed to be improved. The data also revealed that all the heads of the schools tasted the food daily before it was served to the pupils. Nearly three-fourth of the heads of the schools opined that there was improvement in the standards of education of children after the introduction of Mid-Day Meal Scheme. A majority (88.6%) of the persons related to the implementing agencies in supervision, selection of place of eating and cleaning the utensils, etc. Some teachers also had advanced loans to the agencies when the funds from the government were delayed. Most of the implementing agencies (68.6%) stated the amount earmarked per child was highly inadequate. Most of the respondents suggested that there was an urgent need to enhance budget from the current rate of rupee 1.60 to rupees 2.00 per child in view of the high price of provisions and vegetables. The parents opined that provision of mid day meal served as lunch to the pupils was considered as a welcome feature as the hunger of the children from poverty groups was mitigated partially. Due to this provision children stayed in their respective schools in the afternoons, thus MDMS, ensured the regular attendance of the children in both the sessions. Parents expressed
that the members of the implementing agencies were taking away some part of the cooked food to their houses which was illegal. The other complaints included improper cooked food and sometimes presence of worms in the rice and vegetables curry.

New Frontiers in Education (2006) published an educational news headed under ‘India’s School Meal Scheme to Get More Funds’ and reported that the Indian government had increased its allocation of funds to state and union territories for the school Mid-Day Meal Scheme. The increased outlay of 50 paisa per child per school was meant to cover the cost of cooking the meal. It was also mentioned in the report that the Cabinet Committee on Economic Affairs (CCEA) had already approved an increase of Rs.1.50 per child from the existing rate, under the Mid-Day Meal Scheme. The CCEA also approved the provision of Kitchen-Cum-Store in around 60,000 primary schools. But the committee stressed that states must continue to attempt constructing kitchens through collaborations. Assistance for cooking and kitchen devises, at Rs.5,000 per school, was also approved. Mid-Day Meals was applicable in 900,000 primary schools across the country, the budgetary outlay for this scheme in the financial year 2006-07 was Rs.43,00 crore, making this the largest school feeding programme in the world. In November 2004, the Supreme Court of India directed all States and Union Territories to provide mid day meals to primary school students by January, 2005. Since then Central Government had been funding the scheme that had also been instrumental in employment generation, particularly for women belonging to disadvantaged sections and self-help groups.

New Frontiers in Education (2006) also published an other educational news headed under ‘Mothers to supervise India’s school meal scheme’ and reported that after women’s self-help group it was the turn of the students’ mother to be roped in to ensure
the success of the Mid-Day Meal Scheme. Mothers on duty would have to look into the quality of food being served and also keep a check on the utilization of funds. Mothers of students would also be involved in monitoring the implementation of India’s Mid-Day Meal Scheme, under new guidelines formulated by the government to improve the quality of food being served under the scheme. The women would also participate in financial monitoring of the programme, in order to check the misuse of funds. At a meeting of a consultative committee for the ministry of Human Resource Development (HRD) held on May 17, members were informed that several states had responded enthusiastically to the HRD Ministry’s proposal to encourage mothers to make ensure the quality and regularity. The ministry had also suggested the setting up of a subcommittee at the panchayat level comprising of the mothers, home science teachers, and nutrition experts to regularly monitor the quality and nutrition level of food. In Himachal Pradesh and Madhya Pradesh schools kept a roster of mothers who were informed by their child when they were on supervisory duty. In Uttaranchal, mothers had been appointed as ‘bhojan matas’ and ‘shayikas’ in all government primary schools. And also in Orissa, the Chief Minister directed that Mother Committee be constituted in each of the 43,000 primary schools to monitor the quality of utensils used in the preparation of Mid-Day Meals. The Chief Minister instructed that payments would be made to the suppliers only after committee is satisfied with the quality of food.

In another Educational News published by New Frontiers in Education (2006) under the heading of ‘MHRD’s year-end review, it was reported that Ministry of human Resource Development recently carried out an year end review of the major activities performed by it in the year 2006 in the field of education sector. This review included; Mid-Day Meal Scheme (MDMS), under which a daily meal is provided to about 12
crore children staying in over 9.5 lakh primary schools and Education Gurantee Scheme (EGS) and Alternative and innovative Education (AIE) Centers. It was found that both MDM & SSA were financed by the 2% education cess. It was noted that number of out of school children had been reduced from 2.5 crore to 96 lakhs over the last two years. Moreover, nutrition norms were raised from the existing 300 calories and 8-12 grams of protein to minimum 450 calories and 12 grams of protein. To effect this revision, central assistance towards cooking cost had been raised from existing Rupee 1.00 to Rupees 1.5 per child per school day with mandatory contribution of Rupees 2.00. In the case of North-Eastern states, the sharing pattern was Rupees 1.0 & Rupees 0.20 between center and states.

Patel (2006) reported that lakhs of Dalit Students studying in Government Elementary Schools across Punjab would soon savor more nutritious food under the Mid-Day Meal Scheme. The center after witnessing the successful implementation of the scheme had increased the calorific value of the cooked food from 300 to over 450.

Pathania & Pathania (2006) examined and evaluated the performance of Mid-Day Meal Scheme in Chamba, Kullu and Sirmaur districts of Himachal Pradesh and found that cent percent of the students of all the districts were found aware about MDM scheme and were also availing the facility of MDM. Hundred per cent students were getting uncooked Mid-Day Meals and only rice was distributed under the MDMS to the students. 65.2% were getting their Mid-Day Meals ration regularly and 11.6% were getting almost regularly. Whereas 23.2% did not get their Mid-Day Meals ration regularly. 62.8% teachers were engaged in the distribution of Mid-Day Meals. 92.4% students revealed that teachers distributed mid-day meal ration impartially and were not found involved in any act of pilferages as revealed by 89.2%. 94.4% children advocated
that they would not stop going to school in case Mid-Day Meal Scheme was discontinued. Cent per cent of the students opined that cooked food be served in the schools. It was also noted that MDM had not obstructed the academic environment of schools as perceived by 97.6% students. Teachers, parents, community leaders and educational administrators found that after the introduction of MDM, the enrolment had increased by 20%. 84% respondents admitted that after the launching of Mid-Day Meal Scheme, the attendance had increased significantly and in 68% cases it had increased by 20% and more.

Ravi (2006) stated that after four years since the scheme was launched, in the southern states of Karnataka and Andhra Pradesh, the statistics showed that enrolment and retention had been achieved. But the school authorities said that their record showed that while enrolment had not been substantially improved as a result of the meal programmes, school attendance had certainly gone up by 10-12%. However, there was plenty of room for improvement in the management of the scheme, and in maintaining the quality of food provided.

Singh (2006) reported that while Punjab Govt. claimed that Mid-Day Meal Scheme had been successfully implemented and there was regular flow of funds for the projects, but the ground realities found were totally different. In a surprise visit by Kapurthala Deputy Commissioner to Khojewala, it was found that the Kitchen of Govt. Elementary School had been locked for last 15 days. Despite the fact that there was enough ration stock.

Singh (2006) reported that in Nawanshahar town of Punjab after receiving complaints about poor quality of rice and wheat used for Mid-Day Meals in primary school, samples were taken by health department officials from 30 schools. The
functioning of the school was found in a mismanaged state. Deputy Commissioner asked Sarpanches to keep checks on the attendance of students who were abstaining from schools.

Sood (2006) reported that Government of India’s two major child development and nutrition interventions included the Integrated Child Development Services (ICDS) and the National Programme of Nutritional Support to Primary Education, 2004, commonly known as Mid-Day Meal Programme. MDMS was well planned nutrition intervention in place for primary school children. Originally launched in 1995 by Government of India, this programme was begun with the hope that supplementary nutrition offered in schools will intensify enrolment, attendance, retention and learning level of primary school children simultaneously impacting on the nutritional status of the children. After the initial reluctance and with the November 2001 caveat to the states had begun implementing MDM (cooked meal) all over the country. Bihar, Jammu and Kashmir and Punjab, though late starters, had also moved to serving a cooked meal in primary schools recently. Both the programmes were sponsored by the Government of India (GOI), with some finance sharing with the states. The GOI had allotted 3345.26 crores for MDM for the year 2005-06. MDM did not cover the children who need them the most. Mid-Day Meals covers the primary school children who attended the school. Those who were out of school or not enrolled in Education Guarantee Scheme (EGS), several of them girls, were unable to derive the benefits of supplementary nutrition. In any case, the school entry age of 6 year was too late to attempt any modifications/reverse of malnutrition, if not addressed at an earlier age. The out of school children were another segment that needed the supplementary nutrition the most, but they were not covered by any means.
Thorat and Lee (2006) undertook a study to unravel caste-based discrimination and exclusion against the Dalits, specifically in the implementation of the Right to Food-related government welfare schemes in Rajasthan, Andhra Pradesh and Tamil Nadu. Out of the 306 villages surveyed in these three states, 301 villages or 98.4 percent had a functioning Mid-day Meal Scheme in the government schools in their respective villages. A functioning Mid-Day Meal Scheme, however, did not always assure access to the Dalits. In small number of respondent villages in these states, the Dalit children were completely barred from a functioning Mid-Day Meal Scheme by the dominant caste communities. 93 percent of the respondent villages in these states hold the Mid-Day Meal Scheme in the school building itself. In two villages in Tamil Nadu, the Mid-Day Meal Scheme was being held in Temples. In Rajasthan 8 per cent of the respondent villages, hired Dalit cooks. In Tamil Nadu 31 per cent of the respondent villages were having Dalit cooks and 27 per cent were having Dalit organizers. Andhra Pradesh led among the three states with 49 and 45 percent of the respondent villages having Dalits as cooks and organizers.

Tribune Correspondent (21, Oct., 2006) reported that resentment prevailed among the teaching community in Kangra over the Mid-Day Meal Scheme, especially after being directed by the State Government to provide more wholesome and nutritious Mid-Day Meals to primary school students at Rs. 1.15 per head day. Teacher said an enhancement of conversion cost per child per day from Rs. 1.76 to Rs. 2.50 was more an eye wash. They sought an increase in the funds from the Govt. or supply of raw material from cooperative societies.

Tribune News Service (24 Oct., 2006) reported that in an attempt to monitor and evaluate the Mid-Day Meal Scheme, the Ministry of Human Resource Development
had asked schools to display information regarding the quantity, quality and utilization of food served to students. The ministry had asked State Govt. to fix monthly tour for the inspection of Mid-Day Meals.

Tribune News Services (28 Oct., 2006) reported that while Punjab Govt. claimed that Mid-Day Meal Scheme had been successfully implemented and there was regular flow of funds for the projects, but the ground realities found were totally different. In a surprise visit by Kapurthala Deputy Commissioner to Khojewala, it was found the kitchen of govt. elementary school had been locked for last 15 days despite the fact that there was enough ration in the stock.

Tribune News Service (28 Oct., 2006) reported that the Sirsa District Administration in Haryana had decided to involve self help groups for preparing Mid-Day Meals for school children. The idea was to bring the mid-day meal scheme under local control. The members of the self help group would be chosen from the BPL families of the village for whom the scheme would be a source of income.

Tribune News Service (7 Nov. 2006) reported that no mid day meal had been served in most of schools of the Yamunanagar District because grocery for the same was not supplied. Mid-Day Meals had not been cooked in most of the 625 schools during the past 15 days, because of the dispute regarding the contract Wheat, Soyabean, Daliya and Rice could not be supplied.

Viswanathan (2006) conducted a study to access the Nutritious Meal Programmes and found that at all India level though the proportion of children in poorer households accessing meals was far lower, the educational attainment among them was significantly better. The gender gap was larger in rural areas for children belonging to
BPL households and not accessing the scheme compared to their urban counterparts. Only a few states in India had the scheme in place, with Tamil Nadu standing out in access rate, with better targeting in rural than in urban areas among the vulnerable including girl child. In urban areas, though the educational attainment was better even among those not accessing the scheme. Study clearly highlighted better health and education achievements among children in states where such schemes were in existence.

Yadav (2006) conducted a study to examine the status of right to education and right to food in terms of Mid-Day Meal Scheme in Haryana and suggested that Parliament should enact a comprehensive Central Act to ensure access of all the children to free and compulsory quality elementary education. There was need to encourage Government-Private partnership in elementary education by establishing more elementary/upper elementary schools with government aid. The study also suggested that the menu of Mid-Day Meal Scheme should be decided at local level. Voluntary Community Support in Mid-Day Meal Scheme should be solicited and encouraged.

Afridi (2007) conducted a study to assess the impact of school meals on school participation in rural Madhya Pradesh and found that the cooked school meal did not have an impact on enrollments over and above the effect which may have been induced by the pre-existing programme of distributing raw food grains to primary school students. But the differentially larger subsidy provided by the cooked meals vis-à-vis raw food grains distribution did lead to an overall increase in the enrollment level of ST girls. There is a large and significant increase in the attendance rate among girls in early grades and a positive, although insignificant impact on first grade boys. The attendance
rates of girls in grade 1 increased by more than ten percentage points due to the cooked school meals.

Banik (2007) in his book Starvation and India’s Democracy stated that the National Mid-Day Meal Programme was believed to have increased the school attendance of children at the national level but its impact on nutritional status and cognitive development among children in Kalahandi was difficult to assess. The programme had only been in operation for a couple of years and suffered from shortage of funds. Since 1998, the programme had on average covered over 90,000 children, constituting 60 percent of primary school children in Kalahandi. Funds did not arrive in time in Kalahandi despite their release by the central government. Schools also faced regular shortage of fuel and cooking ingredients and the District Social Welfare Department was unable to withdraw the entire food stock (88,188 quintals) allotted in the Kalahandi in 1995-99 for distribution among schools because of lack of available transport and poor communication with the FCI. In the final analysis, the National Mid-Day Meal Programme did not have a chance to make off before it was terminated in April 2000 when Orissa government claimed the programme adversely affected the education system with teachers and students spending too much time preparing meals.

CUTS Center for Consumer Action, Research & Training (CART) and World Bank (2007) made an assessment of Mid-Day Meal Scheme in Chittorgarh district of Rajasthan through a pilot study and found that most parents and students appeared to be satisfied with the implementation of the MDMS and appreciated the government’s efforts in running the scheme. 9 percent of the interviewed parents accepted that their children received the Mid-Day Meals every day. 90-95 percent of parents accepted that the children consumed the mid-day meal at the school and did not take it home. 25
percent of the parents & 11 percent of the students said that the Mid-Day Meals was sufficient for the growing children. Only 21 percent of the schools received the funds every month in time. The remaining schools received the funds with delays ranging from 2 to 6 months. 67-80 percent of the funds transferred to Zilla Parishad for meeting conversion cost remained unutilized at the district level in the last two years. 72 percent of the parents were of the opinion that both students attendance and the quality of education had improved as a result of the MDMS. Enrolment and retention of 64 percent of the schools but had not shown any significant improvement in 25 percent of the schools did not have a kitchen shed and only 36 percent had a separate store room.

Gayatri (2007) reported that the Mid-Day Meal Scheme had proved to be a boon as far as getting children to school was concerned. It was a big temptation for them. The high drop-out rate had also been checked. Parents seemed to have taken the Mid-Day Meals bait to send their wards to schools. The cooked Mid-Day Meals was available to as many as 14.94 lakh children across the state. The work of cooking the meals had passed on to local women, specially employed by the schools for the purpose.

Kumar (2007) conducted a study on the Mid-Day Meal Programme in Municipal Corporation Primary Schools of Delhi and found that in most of the schools meal distribution started everyday 15 to 30 minutes before lunch break and most of the time seals on the containers were not present. As per Municipal Corporation Delhi guidelines child should get 180 gms. of meals every day, however it was found that in 80% of the schools only 140-160 gms. meals were served. 70% of the teachers viewed that the Mid-Day Meal Programme had positive impact on the enrollment and general attendance of the children. Whereas 70% of the children (1st to 3rd classes) agreed about sufficiency of Mid-Day Meals but students belonging to fourth and fifth classes
did not agree with the sufficiency of Mid-Day Meals served to them. According to 60% of the parents the quality of food items of Mid-Day Meals was ‘Kamchlau’. However 60% of the parents were satisfied with the distribution of the cooked food instead of distribution of ration to their wards.

Lohumi (2007) reported that Himachal Pradesh with enrolment already touching 99% and no visible signs of “hunger” in the state, the Mid-Day Meals Scheme did not hold much attraction either for the education authorities or the children. The hill state had its share of poverty but the people were not so poor as would make them send their children to school for meals. It was thus hardly surprising that the scheme was considered as an unwarranted burden by the education department particularly for the teachers, who had to ensure that hot cooked meals were served to students every day.

Naim (2007) reported that there was no impact of MDM on attendance in Uttar Pradesh. About 1.86 crore children were entitled to free cooked Mid-Day Meals in their schools across the 70 districts of Uttar Pradesh. For at least 60% of those children that was the first meals of the day crucial to their nutritional status. Keeping that gigantic task in mind, the state Govt. set up the Mid-Day Meals authority under a registered society from December 2006, in order to streamline its supervision of the department of basic education.

Robinson (2007) prepared a report on the implementation of the Mid-Day Meal Scheme in four districts of Madhya Pradesh and reported that Madhya Pradesh Government claimed that the Mid-Day Meal Scheme was implemented in 100% of its public primary schools on the ground though implementation was still far from universal. The meal was not being served because of corruption, teacher’s absenteeism and lack of infrastructure. He also, reported major implementation failures as the
teachers being distracted from their educational duties by their responsibilities involving the organization of the Mid-Day meal, cooks in small school not being paid enough because of the per student pay structure of the Mid-Day Meal, deficiencies in the quantity of food being served in several parts of the state, an inadequate supply of drinkable water at many schools.

Seth (2007) reported that nearly 36 students of Govt. primary school, Kailram, of the Kaithal District, fell ill after they took sweet rice as Mid-Day Meals. Some students started vomiting and complained of nausea while others had loose motions. Villagers criticized the Mid-Day Meal Scheme and said that the Government should stop it. As it was not managed properly and food served under the scheme was of poor quality. They said some other incentives should be provided to the students after consultation with the parents. However, Jai Parkash Shastri, State Deputy General Secretary, Haryana Teacher’s Union said that the scheme should continue but Govt. should provide proper working and storage facility for food grains to save these from getting contaminated.

Sethi (2007) reported that in rural Punjab only the poorest of the poor send their kids to Govt. Primary Schools. The system had been streamlined to a large extent leading to improvement in school attendance. Lack of infrastructure like kitchen, store rooms in these schools made implementation of the scheme difficult. The quality of food being given to the students needed drastic improvement. In Manakpur Sharif village in Morinda on a particular day 180 students could not get their meals as it was raining heavily.

Sethi (2007) reported that Chandigarh administration had fared much better in implementing the scheme ever since it was envisaged in 1995. Since the city was small and more manageable, the administration was following the centralized cooking
method. For almost 40,000 students studying in Government Primary Schools, Mid-Day Meal was cooked at three centralized schools chosen by the administration and distributed in schools. The school as a result did not have to bother about the storage of grains and cooking of food.

Sharma (2007) found that in Delhi Mid-Day Meal was low on quality and poor in hygienic. Children were treated like beggars and food literally thrown in their plates in the most undignified manner. There had been instances of food poisoning in Delhi, particularly in Wazirabad and Azadpur area. Good quality rice given by the Govt. for the scheme was sold by suppliers in the market. In its place, poor quality rice, costing Rs. 6-7 per kg., were brought as and given to the children. The same had gone for Rajma, Chhole and Wheat flour.

Tandon (2007) reported that according to Biraj Patnayak, member, Supreme Court Commission on Right to Food set up in 2003, Mid-Day Meal, ICDS, National rural Employment Guarantee Act and other such schemes were yet to be implemented into right earnest. Punjab and Bihar were the worst in the implementation of Mid-Day Meal Scheme.

Tribune correspondent (3 Jan. 2007) reported that in Rewari Supplementary Nutrition Programme (SNP) of the state was launched for simultaneous distributions of nutritional supplements among children, lactating and pregnant women as well as adolescent girls at Angan Wadis. Food items were prepared by women’s self-help groups, the nutrition rates had been raised from Rs. 2.50 to 5 daily for women and from Rs. 2 to Rs. 3 daily for children. Tribune News Service (3 Jan. 2007) also reported that 67 children of Govt. Primary School, Kalupur on the outskirts of Sonepat were admitted to two hospitals due to suspected food poisoning following the eating of rice cooked
under Mid-Day Meal Scheme. Tribune News Service (22 Jan. 2007) also reported that in Bangalore State Govt. had withdrawn its order to supply eggs to students under the Mid-Day Meal Scheme. Milk had won the battle against eggs as the supplement to be provided to 58 lakh government school children under the Mid Day Meals Scheme.

Whereas Tribune News Service (6 April. 2007) reported that Govt. of Jammu was planning to extend the mid day meal scheme to the upper primary level to cover around 14.43 lakh children studying in government schools up to eighth standard. As the scheme had not only helped in arresting the dropout rate in schools, but also helped in containing malnutrition, that to anemia, a problem common among poor children.

It was also reported by Tribune News Service (3 Aug. 2007) that after the deputy commissioner of Udhampur detected irregularities in the Mid-Day Meal Scheme, a team of the senior officers of the education department collected samples of food grains and cereals from different schools and started Investigation. And, found that in some educational institutions C grade rice was cooked for the students. Huge quantity of sub-standard rice was also found in the store at the zonal education officer’s store. It was alleged that quality food grains supplied for Mid-Day Meal Scheme were being sold in market and sub-standard grains were being supplied to the schools by the official concerned. Moreover, Tribune News Service (24 Dec. 2007) also reported that in Sindpur Middle School of Danbad in Jharkhand, in a classic case Mid-Day Meal could not be served to the children for last 18 months owing to the religious divide. It was reportedly stopped in the middle of 2006 when the Hindu students had refused to eat food prepared by a Muslim cook. Of the total 125 children in the school, 29 belonged to the Muslim community.
Bala (2008) conducted a study on Mid-Day Meal Programme in Faridabad and found that the most of the parents and students were in favour of distribution of Mid-Day Meals. Whereas most of the teachers considered it a burden on them. Most of the teachers and students said that food quality had been satisfactory but majority of the parents felt that food quality was inferior. Almost all the teachers, parents and students accepted that MDMS provided real knowledge about nutrition, health and cleanliness. According to an overwhelming majority of students and teachers there was a proper system of storage and drinking water for cooking. Many teachers opined that money provided by government was not enough. The cooks were trained but they were not given sufficient salaries. Most of the parents were not interested in the participation in the scheme as community members had felt that the programme should be organized by some other agencies. Teachers and students were in favour of delivering packed food, whereas parents opposed that opinion. Most of the teachers were not interested in the continuation of the programme in future but parents were very much interested in the continuation of MDMP. All the respondents wanted that fruits should be provided some times and there should be variety in the meals provided every day.

Baru, Dasgupta & Mohanty (2008) in their article ‘Full Meal or Packed Deal?’ stated that the recent moves to replace cooked meal with processed foods in the Mid-Day Meal Scheme (MDM) and Integrated Child Development Services(ICDS) had been opposed by networks and alliances of scientists and non- government organizations(NGOs) across the country. The experience of dry ration and biscuits which were part of the National Programme of Nutritional Support to Primary Education, prior to Supreme Court order on cooked meal had shown that these were often not consumed by children and though they did push up enrolment it had little
impact on attendance and retention level. The nutritional impact of dry snacks had also been questioned and it was seen that the impact was likely to be far lower as compared to a cooked meal. It needed to be pointed out that biscuits were processed food that were low on fiber and high on trans fatty acids, both mono and poly unsaturated that were seen as an important long term risk factor for a range of emerging diseases like coronary heart disease and diabetes. A freshly cooked meal offers a better range of nutrients and packed food was costlier in terms of per rupee nutrient yield. In both ICDS and MDM the evidence suggested that children often took the dry food home and may or may not eat it later, and in context of poverty, this food often got shared by family. Subsequently, the statement was submitted and discussions were held with the prime minister and the union minister for human resource development. Following this the Prime Minister reaffirmed his commitment to reduction of malnutrition and the planning commission had stated his position in favour of hot cooked meals prepared by women’s group and members of local community.

Chauhan (2008) reported that remaining non-committal on allowing cooked meal for children below the age group of six years, Women and Child Development (WCD) Minister, Renuka Choudhury said that the center could not direct state on what type of food be served to children. At a meeting with right to Food Campainer Jean Dreze, the WCD minister refused to be drawn into the controversy on which food is better for children-fortified food or hot cooked meals. She suggested that both type of food could be tried in a phased manner before one of them is opted for the entire country. The WCD ministry had been supporting the idea of providing fortified food, biscuits, to the children, despite resistance from the Planning Commission, ministries like HRD and Food. Dreze had been leading the campaign against fortified food saying it does not
have necessary nutrition required for a child’s development. He said he wanted the ministry to direct the states to provide hot cooked meal to children through Anganwadi Centres but opposed any move to centralize the Integrated Child Development Scheme (ICDS). Incidentally, the issue of food for children was missing from WCD ministry’s presentation on the revamped ICDS to the Cabinet Secretary on March 20. Instead, the ministry spoke about its plan to make the scheme more effective by empowering the self-help groups at the village level & panchayats. The ministry had also proposed to set nutrition and performance targets for states and sign a memorandum of understanding for the same with them.

Chauhan (2008) reported that more than a third of the food grains meant for Mid-Day Meals for Delhi’s school children was going waste. Children were being served lesser food and fewer calories than they need. Over 10.43 lakh primary school children were served just 65 gm of cooked food for every 100 gm of food grains lifted. Ministry information showed that the Mid-Day Meals monitoring system in the Delhi was the weakest in the country.

Chauhan (2008) reported that even though the Delhi government had claimed that it had lifted only 51 per cent of the food grains allotted to it by the HRD ministry, it maintained to have supplied hot, cooked meal to 100 per cent children enrolled in primary schools in Delhi. This despite the fact that 35 per cent of the food grains lifted had gone down as waste. But the state government’s claim had fallen flat in the wake of an internal assessment done by HRD ministry.

Chuaungo (2008) participation of cent per cent children in all schools in Mid-Day Meal Programme improves the atmosphere of the schools. The practice of children taking the same meal at the same time from the same kitchen did away with inequalities
among children coming from different backgrounds. There were many primary schools in the state where teachers not only tasted the Mid-Day Meals and oversaw the food being served; but participated in eating the food after giving contribution in cash and/or in kind. Some schools in Mizoram had greatly utilized the compounds by growing/planting fruit trees such as mango, guava, jackfruit, banana and others to supplement Mid-Day Meal with fruits and also to make the campus look green as well as eco-friendly.

Chugh (2008) conducted a study on the government primary school Mid-day Meal Scheme. In that case study of best practices of the Mid-day Meal scheme in Maharashtra he found that the gas connection had not been provided in all schools. Maharashtra had been successfully implementing the Mid-day Meal scheme with the involvement and active participation of Village Education Committee/ Ward Committees, Parents, Community, Self Help Group and NGOs were contributing positively in the successful execution of the Mid-day Meal Scheme. Each child in the primary school/EGS center was provided nutritious cooked meal. Food grains were provided timely and the utilization by the school was done efficiently. Funds were most often released on time in order to had uninterrupted implementation of the scheme. Cooking was generally carried out at the place of self help group which were located in the close vicinity. This had dual advantage as it did not create disturbance in the school and children got hot meal due to closeness of the school premises. It also reduced the burden of the teachers because they did not have to be physically present while the food was being cooked.

Chugh (2008) conducted a study of best practices of Mid-Day Meal Scheme in the state of Punjab and found that in all the schools the provision of meals was never
interrupted though there had been delay in the delivery of funding. Teachers were able to keep the meal programme going either by spending out of their pockets or borrowing from the store and vegetable vendors on loan basis. Teachers made an extra effort and purchased the grocery items and also took food items on loan so that the children get food regularly. Though the activity of the teachers was increased on account of the preparation and supervision of Mid-Day Meal, but they did not find it as burdensome. It was an encouraging finding that most of the teachers took it as one of their pleasant duties and many teachers got pleasure to feed the hungry children as they believed that no learning was possible with empty stomach. Some of the students reported that the food being served was better than prepared at home.

Dreze (2008) in his article stated that there had been a number of studies on Mid-Day Meal scheme during the last decade. Number of useful insights emerged from these studies. Provision of Mid-day meal was fairly regular in most states. Mid-Day Meal Scheme was also popular. Parents and teachers generally wanted the scheme to continue. But some upper-caste parents resented their children sharing food with the dalit children, or eating food made by a Dalit cook. Mid-Day Meals seems to be quite effective in promoting regular school attendance.

Gupta (2008) conducted a study of best practices of Mid-Day Meal Scheme in the state of Uttarakhand and found that the scheme of Bhojan mata was being implemented but it was not in the true spirit. Bhojan mata was seen as one of the wage employee with all kinds of wage related problem. It was not one of the mothers from the society who come to contribute to school programme. Bhojan mata was not always from BPL family. The concept of Bhojan Mata as the name suggests was actually not in practice. The implementation of the scheme was not found systematic. Links between District,
Cluster Resource Centre (CRC) and Block Resource Centre (BRC) were found missing. Information was not percolating from state level to school level.

Josephine (2008) conducted a study to find out the best practices in the implementation of Mid-Day Meal Scheme in Arunachal Pradesh and found that all schools had the Village Education Committee (VEC) and were holding VEC meetings from time to time for the implementation of school environment. Cooks were engaged from the available women in the locality belonging to ST category. Attendance of the learner had been improved and found satisfactory. At that time Mid-day Meal were not being provided because of some policy decision. Head of the school informed that earlier it was being provided regularly and for the 4/5 months would have been stopped because of insufficient food grains and delay in release of conversion cost by the Government, which cause problems to the institutional head. Food grains allotted and actual enrollment was quite different.

Josephine and Vetukuri (2008) conducted a study to find out the best practices in the implementation of Mid-Day Meal Programme in Andhra Pradesh and found that the programme had reduced dropout rate and shown improvement in retention. It had curbed teacher absenteeism and narrowed social distances. Few constraints existed in some places like cooks had to cope in the most challenging circumstances as lack of basic facilities such as water supply, lack of proper kitchen sheds (non-educationally backward blocks) shortage of LPG during rainy season cooking with fire wood etc. There were few complaints received on the quality of food grains. Monitoring in Andhra Pradesh was very scant since there was shortage of manpower in the Department. The Mid-Day Meal Programme implementation through Public-Private-
Partnership mode in Andhra Pradesh was a win-win situation for the private players, Government and community.

Mallik (2008) conducted a study to find out the best practices in the implementation of Mid-Day Meal Scheme in Orissa and found that eggs were being provided by the schools twice in a week (Wednesday and Friday). Some of the schools provided rice and dal along with the mixed vegetables twice or thrice a week. Some of the schools provided homemade pickle to the children during lunch hour. Women Self Help Group was very active in managing the Mid-Day Meal Programme and they appointed cook and helper for preparing the food. They paid the consolidated salary of @Rs.200/- and @Rs.100/- to the cook and the helper respectively. In the absence of the cook and the helper, the Self Help Group prepared the food for the children. This had helped in an uninterrupted supply of food to the children on daily basis. Women Self Help group kept the dal, rice and other items in their houses to avoid the stealing of the same. The children brought their own plates for taking food and washed it and put in their school bag. All the schools had purchased the utensils for the Mid-Day Meal Programme. The VEC members also visited the school during the lunch hours to oversee the Mid-Day Meal Programme.

Manju (2008) conducted a study to document best practices of Mid-Day Meal Scheme in Haryana and found that by September 2007 the scheme had covered in the entire 14496 primary schools and AIE centres i.e. in 20 districts and 119 educational blocks of Haryana. The total enrolment of the children benefited from the programme was 16.11 lakh, out of it Schedule Caste beneficiaries were about 5.99 lakh. Other backward caste beneficiaries were 4.04 lakh. In addition 1.27 lakh beneficiaries were from AIE centres. The Commissioner Education and Language looked after Mid-Day
Meal Scheme. He/She was assisted by Director Elementary Education, Additional Director and Assistant Director of Mid-Day Meal. District Education Officer was responsible for implementation at District level, which was supported by Block Education Officer. At grass root level head teachers looked after the implementation of the programme The Mid-Day Meal Committee was responsible for purchasing and supply of food grains. The committee ensured that food grain was purchased timely through Food Corporation of India (FCI), the purchased food was supplied in the schools through Consumer Federation (CONFED) at BPL rate. The menu committee had been constituted at the state level that prescribed weekly menu for all the schools. The menu had been made for all the schools. The menu had been made for 5 days for the sixth day i.e. Saturday meal was provided to the children as per their request. In all the schools to handle the operation of Mid-day meal properly, honorary cooks were recruited on the basis of school enrollment. After 100 students another cook could be recruited and then total salary was divided between both. Generally local people were recruited for it. Preference was given to Schedule Caste or women who were widow. After the introduction of Mid-Day Meal Scheme in state, the enrollment and retention of girls at primary level had increased.

Nagarangan (2008) reported that in 2004, only a little over half the children enrolled for the year 2004-05 were covered under the Cooked Mid-Day Meal Scheme. Even at that time, many states like UP, Bihar and Assam were yet to implement the scheme in all their schools. Food and allotted by the centre were easily delivered because of inadequate monitoring. Food served did not meet the required calorie and protein requirement mandated by the centre. Children had complained of indigestion. Often the meal was cooked in unhygienic conditions.
Satinder (2008) reported that Dr Upinderjit Kaur launched the packed mid-day meal scheme for nearly 60,000 children of 650 primary and upper primary schools in the district by flagging off vehicles carrying steaming hot Mid-Day Meals in stainless steel containers for various schools from centralized kitchen in Barnala village, near there. Minister said the packed Mid-Day Meal Scheme when launched throughout the state was expected to mitigate the hardships of around 70,000 school teachers in Punjab who were at that time associated with the preparation of mid-day meal in the schools for around 22 lakh children. It was also expected to maintain uniformity and nutrition levels of the meal across the state. DGSE Krishan Kumar on the occasion said that all schools would get the packed meal daily well in time within an hour and half of preparing it. He said there was a set, different menu for all the six days of the week to ensure students' interest in these meals.

Srinivas (2008) conducted a study on the good practices of Mid-Day Meal Scheme in Karnataka. And found that the success of the Mid-Day Meal Programme in the state was to a very great extent, due to the active participation of the teachers. A number of schools had planted and grown fruit and kitchen gardens in their school compound. To maintain social equality at the grass root level one cook appointed in every center necessarily belonged to SC/ST communities. Only women were appointed as cooks with preference given to widows, single mothers and destitute women. LPG was used in the preparation of food. Cooks had been trained in the preparation of hygienic and healthy food and in maintaining cleanliness. All children were served food by making them sit in rows irrespective of caste and creed. Pucca kitchen sheds were provided to the schools out of various schemes of Zilla Panchayath and State Funds.
Tandon (2008) reported that the government was mulling inclusion of milk among foods being served under its flagship Mid-Day Meal Programme. The Consideration follows an exhaustive proposal made to this effect by the National Cooperation Dairy Federation of India (NCDFI). They proposed to serve 200 ml of milk per day per child under the programme. NCDFI for its part rules out storage problems, saying it would supply milk at a notice of 50 minutes wherever needed, including at the village level.

Angom (2009) conducted a study of the good practices of Mid-Day Meal Scheme in Manipur and found that all children irrespective of their differences took cooked meal in schools. They did not bring Tiffin along with them from home. Teachers oversee while cutting the vegetables, while cooking and at the time of serving the food to the children. High attendance rate was a good practice in the state with regard to Mid-Day Meal. Some schools in the rural areas had started having their own kitchen garden. These schools serve seasonal fresh vegetables. Display of day to day menu on the board helped to know by everyone that what meals were to serve in the school and it was also one of the good practices.

Banerjee (2009) reported that the Ministry had drawn up special Mid-Day Meal during summer vacation in primary schools in most backward areas where draught situation might develop, if monsoon fails. Not only in drought-hit areas, but in primary schools of remote villages would get the benefits of Human Resource Development (HRD) scheme during the summer vacations. The scheme which began from early 2005, HRD claimed had already improved Gross Enrollment Ratio and retention rate of the students at the primary level. The Union Government, which was providing a monthly grant of Rs 60,000 per month to primary schools in the states and Union Territories, was also worried for the fact that in some of States like, Madhya Pradesh,
Uttar Pradesh, Bihar, Assam, West Bengal and Orissa, the state of Mid-Day Meal was not well. In case monsoon fails, in these areas the situation would worsen, so it had to be planned in advance.

Bhasin (2009) reported that a rat was found in the food which was to be served to children of a school in Kondali, A-block, a much to the horror of the staff. At around 10 am, when Mid-Day meal sent by an NGO was being inspected, a dead rat was found floating in the dal. The civic agency had recently increased the amount of money spent on Mid-Day Meal per child from Rs 2 to 2.50 in an attempt to improve the quality of food provided. In fact to ensure that the quality of Mid-Day Mal was good; Standing Committee members had decided to conduct surprise checks in schools. The education department was also supposed to ensure that the kitchens of the NGOs were properly maintained. Around 200 gm of food was provided to around 9 lakh students everyday at a cost of Rs 32 crore per annum.

Bhushan (2009) conducted a study of best practices adopted in Mid-Day Meal Scheme in Bihar and found that Mushari block food was cooked at panchyat level and cooked food was being safely transported to school within an hour of preparation. Additional advantage of the role of Mahila Samkhya was observed in terms of Women Empowerment. At the school level Mahila Samkhya served the food. Process of serving was very well managed. To prevent the delays in lifting the food from FCI godown the government of Bihar decided that as soon as Mid-Day Meal Directorate at the state level decides the allocation of food to the districts, State Food Corporation (SFC) could lift the food from FCI for a particular month.

Devi (2009) conducted a study on the opinion of middle school teachers towards the provision of Mid-Day Meal Scheme in Ballabgharh Block of District Faridabad in
Haryana and found out that 15 percent of teachers opined that all the children were taking advantage of this programme. 94 percent indicated that the programme of Mid-Day Meal was serving its purpose according to the objectives of launching this scheme in middle schools. 87 percent of teachers were of the view that the food served in the schools suited to all the students. 91 percent of them declared that the parents and guardians had a positive attitude towards this Mid-Day Meal Scheme. 80 percent of teachers favored ‘Mid-Day Meal Scheme of Middle Schools’. 70 percent of teachers felt that there should be involvement of the villagers in the programme for the smooth functioning of this programme. 86 percent of teachers were of the view that the children were satisfied with the quality and quantity of food served to them in school. 84 percent said that the higher officers were feeling concerned with the provision of Mid-Day Meal Scheme. 84 percent said that they were satisfied with the delivery and supply system of the food materials to middle schools. 60 percent of the teachers opined that this programme was an unnecessary burden on them, and the same proportion opined that they got sufficient funds from government for meeting out of expenditure of cooking. 7 percent gave the opinion that the food material provided to school was of poor quality, but the rest 93 percent were satisfied with it.

Gupta (2009) reported that about 40 school children of Government Primary School, Tikkar Khatriyan, Hamirpur had been admitted in a hospital reportedly due to food poisoning after eating “Khichri” in the Mid-Day Meal made from poisonous water from tank in which a dead snake was found. Students complained of loose motions and vomiting, after having Mid-Day Meal being, provided in the school. Mid-Day Meal workers had also fallen ill.
Gupta (2009) conducted a study on cooked Mid-Day Meal Scheme on ten primary schools of Nadia District of Kolkata, and found that out of ten surveyed schools, in 7 schools this programme was started in 2004. However, in one school scheme was started in 2003 and in remaining 2 schools started running from the year 2005. Head teachers of 9 schools had declared that Mid-Day Meals was given for 5 days a week (i.e Monday to Friday). However in one school, Mid-Day Meals was occasionally given on Saturdays as well. Head teacher reported that full support and cooperation was obtained from the community members and from assistant teachers in running the Mid-Day Meal Scheme. 4 out of surveyed schools had reported the receipt of good quality food grains. In 6 schools head teachers decided the daily menu but in remaining 4 schools, menu chart were provided from the block office. Head teachers in 9 schools reported that enrolment and daily attendance of students had increased; the number of dropout in surveyed schools was practically nil.

Hindustan Times correspondent (2009) reported that the MCD’s Standing Committee had made a subcommittee to keep a check on the quality and quantity of food given in their schools. The committee had stated that a single NGO should be allowed to supply food to 25,000 and 75,000 students. This was stated after the committee felt that it was the only way to maintain the quality. The Municipal Corporation of Delhi had earlier decided to give tender to only NGOs and not to private caterers.

Kaushal (2009) conducted a study to find out best practices in the implementation of Mid-Day Meal Programme in Rajasthan and found that Government, NGOs and Public Private Partnership Organizations had made schools a place of attraction for children who were not able to afford decent meal in their homes. The variety in food
items served everyday was guaranteed with complete satisfaction of the parents and children. Special attention was being paid to cleanliness and hygiene of cooked food. All cooks were women and majority of them were from SC/ST background. All children were treated equally irrespective of their differences. High attendance rate was a good practice in the state with regard to Mid-Day Meal.

Kumari, Devi & Rani (2009) conducted a study to evaluate the impact of Mid-Day Meal Scheme in Tribal Areas of East Godawari District of Andhra Pradesh and found that 70% of the teachers felt that the Mid-Day Meal Scheme improved the retention rate and attendance of children in schools because food was given to only those children who attended the class. About 84% of the parents felt that their children were healthier and active after taking the mid-day meals regularly. More over 87% of the parents felt that children were getting better meal at the school compared to their home. Furthermore, in 97% of the schools, unless they had serious health problems, 55 out of 60 children felt that the taste of midday meal was good. On the other hand 27% of the children reported that sometimes insects were found in the cooked rice. Whereas 88% of the children said that they were attending school regularly because of Mid-Day Meals provided in the school. Most of the cooks interviewed by the researcher felt that there was a need for more utensils.

Lodhia, Shah and Desai (2009) conducted a study to document good practices adopted for Mid-Day Meal Scheme in Gujrat and found that Mid-Day Meals had become a routine phenomenon for children, teachers and parents, there was no doubt that enrolment rate had sharply increased over a period of time. One of the reasons for this increase was Mid-Day Meal Scheme. However, Mid-Day Meals had not been successful in making children attending school regularly. This was just because of the
fact that implementation of Mid-Day Meal Scheme was neither regular nor efficient. Inadequate quantity, inferior quality and lack of variety in food were the major constraints which had made Mid-Day Meal Scheme very ineffective.

Lohe (2009) conducted a study on the impact of Mid-Day Meals Programme with reference to Ebrc-Chozuba, Pehk District, and found that the enrolment growth rate had increased from 7.9% (pre-MDM period) in 1993-94 to 26% in 2008-09 after MDM periods i.e, for six schools. The retention rate had also increased from 58.1% during pre-MDM period to 78.13% in 2008-09 after MDM periods. The dropout rate for 6 schools was 33.43% in 1994-95 (pre-MDM period) reduced to 31.15% in 1995-96 (after MDM period) and further reduced to 17.43% in 2008-09 respectively. The hot meal cost per child per day was tabulated at an amount of Rs. 1.80 per head in schools. The lifting of food grains from the F.C.I. godowns to District Inspector of Schools, level getting delay.

Menon (2009) conducted a survey to find out the best practices in implementation of Mid-Day Meal Programme in Meghalya and found that in the hygienic conditions the activities prior to and after cooking was taking place in the kitchen shed. The spirit of services was evident right from the cook who was usually a female, to the teachers who were serving the meals and the mothers present while the children seems to be extremely happy while taking the food and enjoying the care provided by both teachers and mothers. The Mid-Day Meal Scheme had increased enrolment in schools in the year 2007-08 the enrolment was 6,27596 in both the primary schools and EGS centers and in the year 2008-09 it had increased to 7,37413. The attendance rate in schools also registered a considerable increase.
Menon (2009) conducted a survey to find out the best practices in implementation of Mid-Day Meal Programme in Tripura, and found that the state government launched the Mid-Day Meal Scheme on 1st March, 1980 for children studying in classes I-V in government and government aided schools. Government of Tripura was spending Rs. 2.30 per child per day for cooked food. State government stated that there was no complaint about the quantity and quality of food grains served under the Mid-Day Meal Scheme. The Mother Teacher Association supervised daily to ensure that specified quantity of rice and other food ingredients were used in preparing Mid-day Meal. The role of organizers in maintaining an uninterrupted and timely supply of food was praiseworthy.

Narula (2009) conducted a study on the National Programme of Nutritional Support in government primary and upper primary schools in Jharkhand. And found that the nutritional programme in Jharkhand had been well received and was a successful endeavour. Food grains were provided timely and the utilization by the school was also done efficiently. Funds were released on time. The programme had been enthusiastically accepted by the community in the state. More girls had started coming to schools. Their attendance and retention had increased over the years. However the Mid-Day Meals, to a certain extent had increased enrollment and retention. It had worked as incentive especially in the areas with food insecurity and hunger and endemic poverty and expected to complement the other initiatives for universalization of elementary education. No discrimination was observed in serving of the food between communities and gender.

Panda (2009) conducted a study on international perspective of school feeding programme and Mid-Day Meal Programme followed in the state of Chhattisgarh and
Madhya Pradesh and found that in rural areas of Madhya Pradesh the Self Help Groups (SHGs) of poor women had been appointed at school level for overall implementation of Mid-day Meal. They lift and transport the food grains from FPS (Food Product Services), procurement and storage of cooking ingredients, appointment of members of SHG as cooks, regular cooking and supply of food and regular maintenance of record and inventory. The schools had a prescribed menu in consultation with Village Education Committee.

Punjab Newsline Network (2009) reported that Dr. Upinderjit Kaur, Education Minister, Punjab disclosed that taking note of persistent requests of Punjab Government, the Union Government has revised the cooking costs and food norms under the Mid-Day Meals Programme being implemented in the state schools. Separate provision had also been made for the payment of honorarium to cooks-cum-helpers at the rate of Rs 1,000 per month. Under the revised food norms for upper primary classes by increasing the quantity of pulses from 25 gm to 30 gm, vegetables from 65 gm to 75 gm and by decreasing the quantity of oil and fat from 10 gm to 7.5 gm. Besides, the upper primary students would continue to get 150 gm per day of foodgrains. The cooking costs excluding labour and administrative charges for cooking the midday meal in primary schools had been increased from Rs 2.08 to Rs 2.50 and from Rs 2.60 for upper primary schools to Rs 3.75. The cooking costs would include the cost of pulses, vegetables, oil and fats, salt and condiments and fuel. The cooking costs would be shared between the Centre and Punjab on 75:25 bases.

Shah (2009) conducted a survey to find out the best practices adopted in Mid-Day Meal Scheme case study of Jammu and Kashmir & found that district Pulwama had certain areas where in Sikhs were in substantial numbers. The Sikh children were not
provided the meals till that year as they resisted sharing common meal. Therefore separate cooks were arranged for such children at the schools from their own community to facilitate their coverage to. In Chatrogam, Lurgam the children enrolled was from both the communities (Sikh & Muslims). The cooks from two different communities took the meal separately to feed the children of both the communities & to hold the religious & cultural sentiments of each community in high esteem.

Snehi (2009) conducted a study to find out the best practices in the implementation of Mid-Day Meal Scheme in Goa and found that all the children in surveyed schools were served hot cooked meal during the lunch break. The schools obtained Mid-Day Meals containers from the Self Help Group by 9.30 AM and it was the responsibility of Self Help Group to ensure Mid-day Meal delivery in time. It was observed that children did not wash their hands before taking the food, but after finishing the meal almost all these school children washed their spoons and bowls. On the one hand this scheme had increased retention, on the other hand it inculcated moral and hygienic values in the children.

State Level Committee on SSA (2009) in a case study report on implementation of Mid-Day Meal Scheme in Nagaland reported that, common kitchen had been established in the heart of Kohima town to cook and serve the Mid-Day Meals to all the 14 Govt. Primary Schools and Govt. Middle Schools in the town. A non-profit voluntary Women Self Help Group, registered under State Govt. had volunteered to take up the responsibilities not only in cooking the meals but also in collecting periodically, as and when required, the allotted food grains and fund from the establishment of Deputy Inspector of Schools for the said 14 Govt. Primary Schools and Govt. Middle Schools.
Times News Network (2009) reported that the Human Resource Development Ministry had proposed linking the cooking cost to the price index of food items, in the Mid-Day Meal Scheme so that it runs smoothly. Linking the cooking cost to the price index would mean that the amount spent per meal was automatically enhanced every time there was a rise in the prices of the commodities. The change was being proposed after representation by states that cost per meal was unsustainable as the prices keep fluctuating. Even the remuneration of cooks was proposed to be raised. It was also suggested that delivery of food grains for Mid-Day Meal Scheme would be then made directly at the district level.

Times News Network (2009) reported that a day after 125 children from a government school in Trilokpuri fell ill after having the mid-day meal, state education minister Arvind Singh Lovely directed the officials from the directorate of education to review the entire system of providing meals in the schools. Lovely held a meeting with the education officials. The officials from the education had been asked to work out a mechanism to provide mid-day meals to the children.

The Tribune (2009) reported that it was an index of the malaise that had set in that five teachers of Jind district in Haryana had been sentenced to a seven year jail term by a district court for misappropriation of Mid-Day Meal funds. The Mid-Day Meal Scheme, flagship programme of the HRD Ministry, the largest school lunch programme. Expectedly, the government held it as a trump card in boosting primary school enrolment and meeting the nutritional requirement of the under privileged children. Yet implementation of the scheme had come under a cloud. Irregularities had been reported across the country. More recently, the Controller and Auditor General (CAG) reported on the scheme in Jammu and Kashmir, spoke poorly of the state’s
intent, five districts in Jharkhand came under a scanner when CAG unearthed Mid-Day Meal scam. Punjab’s track record on the scheme had been far from evitable. At times cooked meals had otherwise meant to not only starve off hunger but to also provide nutrition. In neighboring Haryana the Jind case was not an isolated example, similar complaints had been reported from various parts of the state also. The district court had done well to sentence the defaulting teachers, including a woman. Hopefully as the court had itself observed, the conviction, the first of its kind would serve effective deterrent.

Tayagi (2009) conducted a study of best practices of Mid-Day Meal Scheme in Tamil Nadu and found that in district Kanchipuram, Vallipuram and Cuddalore of Tamil Nadu the state government irrespective of political set-up had a strong and sustained commitment for continuous supply of Mid-day meal in primary schools. The social welfare and Nutritional Meal Programme Department at state level and network with the Tamil Nadu Civil Supply Corporation ensure the constant supply of food items. Double Fortified salt was used in the Mid-Day Meal in several districts which were Goiter prone in the state. As per the recommended dietary allowance for Indians, Indian Council of Medical Research (ICMR), 1989, the state government provides three eggs to the beneficiaries. In order to protect the women folk and the environment, the government decided to modernize the kitchens by providing LPG connections with gas stove, and so had provided Rs. 5.81 crore to modernize 5440 centers. The whole process of preparation and distribution of Mid-Day Meals included not only the daily workers at each centre, that was, the noon-meal organizer, cook, and the assistant but they also got the cooperation from teachers, head teachers, mothers and members of Village Education Committee. Regular provision of Mid-Day Meals to children was itself a best
practice. Enrolment was on declining, dropout of children was almost stopped and even ratio of enrolment had increased in these schools. It was seen that the quality of raw materials of food articles was good. In majority of the centers the organiser and the cook were experienced persons.

Varma (2009) reported that in a country where an estimated 41% of the children were underweight due to poverty, the provision of hot, cooked meals at schools had been a spectacularly popular programme. Initiated in typical half-hearted fashion in 1990s, direction from the Supreme Court in 2001 made it mandatory for schools to provide cooked meal. Since then, over Rs. 33,000 crore had been spent on implementing the programme, 80% of it in the UPA’s tenure. As of 2009, about 11.74 crore children studying in classes one to eight were getting mid day meals, making it the largest school meal programme in the world. Of these, 8.24 crore kids were in primary section (class I to V). The scheme was also a key factor behind rocketing growth in enrolment in the primary sections. It was extended to classes 6 to 8 last year. Huge investments were required every year, but the immense benefit made it worth the while.

Vetukuri (2009) conducted a study to find out the best practices in the implementation of Mid-Day Meal Scheme in Goa and found that in Barapahar M.E. School most of the children were from tea garden families. Majority of them attended the school because of Mid-Day Meal Scheme. The average attendance of the students in schools was 85 per cent. Nathu Danga L.P School which was situated in tribal area, the school had permanent kitchen shed which was hygienically maintained by tribal women. There Mid-Day Meal Scheme increased the enrolment from 50% to 80%. In the village Mother Group members were cooking Mid-Day Meal and serving to the students with the help of School Managing Committee members and teachers.
Wizarat (2009) conducted a survey to find out the best practices adopted in Mid-Day Meal Scheme and found that the enrolment of girls had increased, especially girls from Muslim and backward communities, because of Mid-Day Meal scheme, and the gap in boys’ and girls’ enrolment had declined. A dietician had been appointed at the Mid-Day Meal authority office to look after the health intervention of the scheme. The involvement of the NGOs and civic body organizations in the Mid-Day Meal Scheme were less in the state. In order to implement the programme effectively a separate Mid-Day Meal Authority had been appointed.

Panda (2010) stated that Chhattisgarh had 887 residential Ashram Schools exclusively meant for the Scheduled Tribe children. The Ashram Schools of Chhattisgarh had the provision of providing food three times a day to the children and in addition, morning and evening snacks were also provided. The hostels had very well organized kitchen with appointed cooks, dining space and grounds for developing kitchen gardens. The cooking material was provided by the school warden/Principal and the day-to-day investment register was maintained by the school for inspection as well as release of money for providing food either on monthly or fortnightly basis. The unit cost per child per day per school varied from Rs. 6/- to Rs. 8/-. The weekly menu was worked out by the teacher and the students and was displayed in the entrance of every school. The timing of the meal was decided in accordance of the food habits of the students residing in the Ashram Schools.

Parida (2010) conducted a case study to analyse the impact of the Mid-Day Meals Scheme on enrolment, attendance and drop-out in primary school in Bhadrak district of Orissa.
Tribune News Service (1 March, 2011) reported that eminent economist and first ICCR Chairman of Indian economy in South Korea, Prof. Goel had suggested the replacement of “Mid-Day” meals in schools with “Breakfast Meals” for better concentration of students while studying in schools. Although the Mid-Day Meal Scheme had shown some results in arresting the dropout rate in schools, there was an economic logic to replace it by “breakfast meals” as it leaded to better efficiency and productivity of any individual.

Tribune News Service (5 July, 2012) reported that:

- Fifty schools in Patiala had stopped serving food to students as teachers refused to spend more from their pocket to keep the Mid-Day Meal Scheme going.
- In Jalandhar, the scheme had been discontinued in three schools, including two government and an aided school, due to paucity of funds.
- More than 37, 000 women who were employed as cooks on a monthly salary of Rs 1000 have not been paid from last five months.
- Traders who had been providing material for the scheme, had been awaiting clearance of their dues worth Rs 40 Crores in various district of the state.

However, sources claimed it was not for the first time that funds to run the scheme were being delayed.

Bellary et.al. (2013) conducted a study to get the information and opinion of beneficiary mothers and teachers on Akshara Dasoha programme they fond that about 80 per cent of beneficiary mothers reported that their children did not carry the school food to home. Higher number of beneficiary mothers reported that children were more found of school lunch rather than home lunch, might be because they share the same
food with their mates and enjoy eating which also indicated that the programme had
narrowed the social distance. Moreover he had also described that 64.44 per cent of
beneficiary mothers of religious institution reported that their children did not consume
breakfast before going to school because children were attending schools of morning
session from 7.30 am to 12.00 noon. Those children consumed the school lunch as
breakfast around 10.00 am. This indicated that majority of children were completely
dependent on school meal. All the teachers have agreed that there was no variation in
attendance with respect to morning and afternoon classes. Teachers also stated that
before Mid-Day Meal Scheme, children who went back to house did not come back to
school, especially, if the house was situated far away from the school, now this
incidence was reduced because of school lunch.

Dhawan (2013) reported that as many 40 Mid-Day Meal cooks appeared for an
examination conducted by Institute of Hotel Management, Catering Technology and
Applied Nutrition, Bathinda following a five day long skill certification course that they
underwent at the institute. During the course, the cooks were trained on how to prepare
food in amore hygienic manner, keeping the food safe, cleaning the machines and
utensils used for food production, work management, food management, food
presentation, maintaining hygiene, utilizing the left overs, right temperatures for storing
different food items etc.

Hindustan Times (2013) reported that while 16 children aged below 10 years and
studying in class 1 to V, had died in Chappra itself, four other were declared dead on
arrival at Patna Medical College Hospital (PMCH) late night. Two died at the hospital
tha morning, official and PMCH sources said.
Among the dead in Saran was the cook, who had refused to use the container but was made to by the headmistress, Meena Devi, said a student who witnessed an altercation between the two.

Following the students statement, Police broke open her residential store and found stoks of food and vegetables were lying together with pesticides and organic manure. They said it seemed one of the insecticide containers might had been used to measure or store cooking oil. Patna Medical College Hospital Superindendent Amar Kant Jha, too said an insecticide mix in the cooking medium could have killed the children.

Singh (2013) reported that the key weakness of the Mid-Day Meal Scheme remained inadequate involvement of grassroots-level structures and elected local bodies. Either they had been totally ignored or their roles and functions had not been delineated properly. It should be mandatory for state government and UTs to develop a detailed citizen charter at the school, block and district level detailing the specific roles and responsibilities of all key Mid-Day Meal officials. The sad truth was that many state governments had not created separate posts of Mid-Day Meal officials and even where they exist, majority remained vacant. School Management Committees (SMC’s) had been constituted in many states, but had not been given the necessary capacity building to ensure that SMC’s provided an important platform for mobilising community participation in monitoring Mid-Day Meal. Role of teachers and head teachers was undoubtedly very critical in the implementation of Mid-Day Meal at the school level as she/he was the only official who was physically present to monitor the entire process of Mid-Day Meal like procurement of food grains and other material, quality of food, regularity in serving hot cooked meal, issues relating to hygiene and sanitation and so on. The Ministry of Human Resource Development guidelines of 2006 for Mid-Day
Meal specifically mentioned that teachers should be involved in ensuring that good quality, wholesome food was served to children, and that the actual serving and eating was undertaken in a spirit of togetherness, under hygienic conditions, and teachers were also expected to taste food prepared before it was served to children. However, that did not absolve other key stakeholders from their obligation of ensuring that the Mid-Day Meal Scheme was implemented in the spirit with which it had been perceived. It was time, to try and plug the holes that existed in procurement of quality food products, to fund dispersal as well as establishing clear roles and accountability across all levels. Social audits and investment in monitoring and evaluation could not be compromised, if we really treasured our children.

Salomi (2013) reported that more than 1.5 crore school children in Bihar were not served their Mid-Day Meals on Thursday after nearly three lakh government teachers washed their hands off the centrally-funded scheme on the grounds that it constituted non-academic work. The scheme meant for the poorest of the poor kids for whom one meal a day was incentive for attending school was in jeopardy with the teachers’ stand. Bihar Primary School Teachers’ Association president Braj NANDAN Sharma said all its members would continue to shun midday meal duties forever.

Times News Network (26 July, 2013) reported that the Allahabad high court said that teachers were meant to teach school children and that’s what they should do instead of being made to supervise cooking Mid-Day Meals. Times views on that was mandating that teachers should not be asked to play a role in monitoring safe implementation of the Mid-Day Meal Scheme could prove dangerous. In the absence of any other effective mechanism for ensuring quality at the level of the individual school, teachers could and ought to play an important role in that process. If the apprehension
of the court was that it will distract them from their primary function, surely a system of rotation should make the load minimal enough not to had such an adverse impact. We needed a mechanism that work at the ground level to ensure the quality and hygiene of the meals. To dismantle what exist without an equally good or better substitute was fraught with risk.

Tandon (2013) reported that for the first time in the history of the Mid-Day Meal Programme in the country, children would have to be compensated with cash if they were not served the promised meal on any given day. That cash allowance would be a legal entitlement of all school children aged 6 to 14 years if their school management and the state government fail to keep the promise of nutrition. The entitlement had been guaranteed under the National Food Security Act, which was set to become a reality after the Lok Sabha passed it recently and Rajya Sabha scheduled to take up the Bill that Monday. Top HRD ministry sources said they were in the process of calculating the Mid-Day Meal allowance that would have to be paid to students against missed meals by the respective state governments under the food security law. Rough estimate suggested per student cash allowance against a missed Mid-Day Meals in primary school (I to V) at around Rs. 5 and for upper primary student at Rs 7.50. “These were preliminary calculations considering the current sanctioned cooking cost per child in primary school was rs 3.34 and for upper primary it was Rs. 5. Cash allowance would, however, have to factor in indicators other than just the cooking cost,” sources in ministry said. Similar cash allowances would be given to children aged 6 months to 6 years who were promised an age appropriate meal free at cost in a local anganwari under the existing Integrated Child Development Services scheme (ICDS). All
pregnant women and lactating mothers, being specified beneficiaries under the National Food Security Bill 2013, would be entitled to food security allowance.

“After the President signs the Bill and it takes the shape of a law, the Central guidelines on the Mid-Day Meal Programme and the ICDS would have to be modified to reflect the legal guarantee of food security allowances. State would have to ensure these,” said an HRD Ministry official. The National Food Security Bill said: “In case of non supply of the entitled quantities of foodgrain or meals to entitled persons would be entitled to receiving such food security allowance from the state government concerned to be paid to each person within such time and manner as might be prescribed by the Central Government.”

After reviewing the related research literature, it was found that a considerable number of research studies were conducted in this field. But the results of these studies fluctuate from one study to another significantly. Although it is generally believed that the introduction of Mid-Day Meal Scheme of Govt. of India has resulted in the increased attendance, enrolment, retention and transition rates as well as improvement in achievement measure or higher concentration. Yet there were many studies (Pollitt 1990, Dreze and Vivek 2003, Garg 2003, Sood and Kumar 2004, Afridi 2005, Blue 2005, Naik 2005, Thorat and lee 2005, Gopaldas 2006, Hasan 2006, Ravi 2006, Singh 2006, Sood 2006, Banik 2007, Lohumi 2007, Chauhan 2008, Banerjee 2009, Devi 2009) which either did not confirm these benefits of the scheme or highlight various limitations in it or describe about the different problems faced in the implementation of the scheme. In view of the conflicting results, the present study acquaints us with the actual status of implementation of Mid-Day Meal Scheme in Bathinda District of
Punjab, however, it necessitates to probing into this area still further so as to accumulate greater evidence in support of one or the other type of results.

Moreover, the present investigation which was undertaken to explore the impact of Mid-Day Meal Scheme of Govt. of India on the enrolment, dropout rate and gender gap in the Bathinda District of Punjab also includes the views and perceptions of the students, parents, teachers and administrators about the scheme. Since no such investigation has yet been undertaken in the Bathinda District of Punjab, the researcher can well claim that her investigation contains an element of newness, which should be an essential feature for every research study.

1.5 OBJECTIVES OF THE STUDY:

1. To study the historical and policy perspectives of the Mid-Day Meal Scheme of government of India and its implementation mechanism in the primary schools of Punjab.
2. To compare the working of Mid-Day Meal Scheme in rural and urban primary schools in Bathinda District of Punjab.
3. To evaluate whether the scheme has been effective in raising the overall current enrolment rate in the primary schools of Bathinda District of Punjab.
4. To evaluate whether the scheme has been effective in checking the dropout rate in the primary schools of Bathinda District of Punjab.
5. To evaluate whether the scheme has been effective in reducing the gender gap in primary schools of Bathinda District of Punjab.
6. To study the views and perceptions of stakeholders, head teachers, teachers, and cooks about the problems faced in running the Mid-Day Meal Scheme in the Bathinda District of Punjab.
7. To conduct case studies of working of Mid-Day Meal Scheme in ten selected primary schools (five rural and five urban) of Bathinda District.

8. To suggest measures to further improve the planning and implementation of Mid-Day Meal Scheme.

1.6 SIGNIFICANCE OF THE STUDY:

In India since Independence, emphasis has been laid on Universalisation of Elementary Education (UEE). Many commissions and committees were appointed from time to time to give suggestions about the development of education in the country, almost all of them recommended different schemes and policies to achieve universalisation of education. But majority of these schemes did not work so well that India could move towards achieving the UEE. Because the fundamental hurdle in the way of achieving the target of UEE was the poverty of the masses. Children from poor families usually suffered from under nutrition, more often they dropped out from schools at an early age, which affected their overall development.

Understanding the link between health and education, the government of India launched Mid-Day Meal Scheme (MDMS) in, August 1995. Now Mid-Day Meal (MDM) has become a part of daily school routine across the country. Today Mid-Day Meal Scheme provides cooked meal to approximately 120 million school children, making it the largest school feeding programme in the world.

Mid-Day Meal can be effective incentive for children and families facing difficult circumstances, especially where a majority of families are unable to meet dietary needs of their children due to extreme poverty and food insecurity, where children are not sent to school since they are engaged in various types of work for economic benefit and where enrolment and attendance rates for girls are especially low due to traditional
barriers. Mid-Day Meal Scheme can be used as a tool to not only directly improve nutrition but also influence a variety of educational and social outcomes of the target population.

Studies done in the field of Mid-Day Meal Scheme in Bihar, Jharkhand, Delhi, Chhattisgarh, Karnataka, Madhya Pradesh, Orissa, Kerala, Tamil Nadu, Rajasthan and West Bengal have given some insight into the scheme. Some studies (e.g. Krishnamurthy 1985, Saxena and Mittal 1985 and Blue 2005) reported that the scheme has gained considerable popularity, especially among disadvantaged sections of the population, as the programme increases the benefit of schooling by promising improved nutritional status of the participating child and thereby, lowers the opportunity cost of attending the school. But at the same time some other studies (e.g. Dreze and Goyal, 2003; Sood and Kumar, 2004; Afridi, 2005 and 2007; Rana, Santra, Banerjee, Mukherjee and Kundu, 2005 and Robinson, 2007) reported that the programme still suffered from major implementation failures in many states. Further, ever since the implementation of this scheme, it has remained in the news due to various irregularities in its proper implementation. Therefore there was need to explore the implementation and working of this scheme at the grass root level.

As far as Punjab is concerned, although a few studies at the Post Graduate Level have been conducted on Mid-Day Meal Scheme but no in-depth study has been conducted about the performance of Mid-Day Meal Scheme, especially in Bathinda District of Punjab.

Therefore the investigator felt the need to examine and evaluate the actual performance of Mid-Day Meal Scheme in Bathinda District of Punjab, through broad-based assessment of the process of implementation of the scheme by doing an in-depth
analysis of the situation. The broad objective of this exploratory study was to clearly identify some of the critical issues associated with the MDM scheme and to do an objective evaluation in terms of efficiency in delivery system and service quality (which includes food safety and food nutrition aspects). Researcher addressed two critical aspects of the scheme: managerial and school logistics issues. Managerial issues pertain to understanding the planning and administration of the scheme by the central, state and local governments. Whereas logistical issues pertain to actual day to day running of the scheme in government schools, such as procurement, storage, preparation, and serving and disposal of food. Issues related to meal timings and consequential implications on academics were also considered.

The findings of the present study will be helpful in planning and organising Mid-Day Meal Scheme at national level, state level, and local level as well as at the school level to meet the needs of the students. It is also hopped that the government of India, government of Punjab, State Mid-Day Meal Cell and District Mid-Day Meal Cell would all be benefitted by actively implementing recommendations of the present study.

1.7 DELIMITATIONS OF THE STUDY:

The study was delimited as stated below:

1. The study was delimited to the primary schools of Bathinda District of Punjab.
2. The study of views and perceptions of stakeholders, Head teachers, teachers and cooks were restricted to 100 primary schools of Bathinda District of Punjab (taken 15 to 20 from each block).
3. The analysis of views and perceptions of the respondents was delimited to the content analysis.
1.8 RESEARCH QUESTIONS TO BE ANSWERED:

1. What has been the historical backdrop of the school meal programmes at the national and international level?
2. What has been the policy of the Government of India regarding the school meal programme in the country?
3. What is the implementation mechanism of Mid-Day Meal Scheme in the primary schools of Punjab?
4. Are there any differences between the working of Mid-Day Meal Scheme in rural and urban primary schools of Bathinda District of Punjab?
5. Whether the Mid-Day Meal Scheme has been effective in raising the overall current enrolment in the primary schools of Bathinda District of Punjab?
6. Whether the Mid-Day Meal Scheme has been effective in checking the dropout rate in the primary schools of Bathinda District?
7. Whether the Mid-Day Meal Scheme has been effective in reducing the gender gap in the primary schools of Bathinda District?
8. Whether the head teachers, teachers and cooks face any problems in management and organization of the Mid-Day Meal Scheme?
9. Whether the stakeholders face any problems in getting the full benefits of the Mid-Day Meal Scheme?
10. What are the views and perceptions of stakeholders, head teachers, teachers and cooks regarding various aspects of the Mid-Day Meal Scheme?
11. How can the planning and implementation of the Mid-Day Meal Scheme be improved further?
1.9 DEFINITIONS OF KEY TERMS:

1. Meal:

Any of the occasions of taking food which occur by custom or habit at more or less fixed times of the day, as a breakfast, lunch, dinner, etc. But for the present study it refers to the lunch.

2. Mid day:

The middle of the day; the time when the sun is at its highest point; noon.

3. Mid-Day Meal:

In the present study Mid-Day Meal refers to the free meal provided to the pupils of the Government Primary Schools of India during lunch break to increase their enrolment, retention & average attendance.

4. Scheme:

A plan; design; a programme of action; the designed scope and method of an undertaking.

1.10 OPERATIONAL DEFINITIONS:

1.10.1 Evaluative Study:

An evaluative study, critically evaluates the effects of policies and programmes on their targets in terms of the objectives they are meant to achieve. It assesses the extent to which goals are realized and looks at the factors associated with successful and unsuccessful outcomes. The assumption is that by critically analyzing the facts evaluation assists decision-makers to make wise choices among future course of action. Criticism of the consequences of programmes should improve decision-making.
1.10.2 Mid-Day Meal Scheme:

Mid-Day Meal Scheme is the popular name for the national school meal programme in India. On August, 1995, scheme was launched as a centrally sponsored scheme by the Ministry of Human Resource Development (Department of Education) with the objective of “universalisation of primary education by increasing enrolment, retention and attendance and simultaneously impacting on nutrition of students in primary classes”. It involves provision of free of cost lunch to school children on all working days. Following the Supreme Court’s orders, Govt. of India revised its guidelines for the Mid-Day Meal Scheme in 2004, 2006 and 2008 which were latest revised in 2009.