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Perceptions About Mid-Day Meal Scheme

A Comparative Study Between Uttarakhand and Tamil Nadu

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Food Assisted Education (FAE) in India has revolutionised the primary education scenario. In-school feeding supports enrollment and attendance rate, lowers dropout rate, improves nutritional status and student's performance. However, the implementation of the Mid-Day Meals scheme (MDM) is not uniform across India. To bridge this gap, a research was undertaken to study the perceptions about the MDM scheme among its beneficiaries and functionaries in the states of Uttarakhand (where the scheme was recently implemented) and Tamil Nadu (which is the forerunner of the scheme). From the success lessons learnt from Tamil Nadu the experiential sharing from the two states is suggestive of certain measures for modifying the current policies and practices for the betterment of the MDM scheme in Uttarakhand, The implication of the study highlights that apart from the funds and guidelines provided for the scheme, it is equally important to focus on the attitude and involvement of the beneficiaries and functionaries for the success of the MDM scheme across the country.

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INTRODUCTION

School education is the process of bringing out the potential of an individual and is indispensable for understanding social problems and change (Aruna, 1994). In India, elementary education is viewed as the basic right of every human being and is included in the Directive Principles of State Policy (Pandey, 1997), with free and compulsory education up to the age of fourteen years. The District Primary Education Programme (DPEP) was launched in 1994 with the aim to universalise primary education in India

through the “*Sarva Shiksha Abhiyan*”, one of the largest education initiatives in the world.

The number of Primary Schools in India is 0.664 million and the continuous efforts made by the Government of India, has increased the net primary enrolment ratio to 83.7 percent (Government of India, 2005). Though the enrollment of students in primary schools has been enhanced, the quality of education remains low. As per Government statistics (September 2004), of the 193 million children in the age group 6–14 years, 35 million children do not attend school. The dropout rates have increased alarmingly; it is 50% for boys and 58% for girls. The PROBE Team (1999) survey in northern India found that the responsibility of household chores and caring for siblings was the most important reason for not sending girls to school. The direct educational costs are higher for girls than for boys (Herz and Sperling, 2004). Food for Education (FFE) programmes have proven to be an effective means of addressing these obstacles, enrolling more girls in school, keeping them enrolled and enhancing their adulthood wellbeing (World Food Programme [WFP], 2000). Evaluations of FFE programmes have shown that it has increased enrollment and attendance of girls in particular, reduced dropouts in the lower primary schools and improved students’ learning capacity (Adelman, Gilligan and Lehrer, 2006).

A cross sectional study of different regions of India, found that child labour, hunger and malnutrition are the major hindrances for childhood education (National Institute of Nutrition [NIN], 2006). Hungry children are less likely to go to school and less able to learn even if they attend. Poverty is directly correlated with educational performance. For poor households, basic survival and sustenance take precedence over education. Poverty and hunger are the prime factors responsible for the cultural practices that impede education (Levine, Birdsall, Ibrahim and Dayal, 2003). Therefore synergy among health, nutrition and education is significant for school participation (Rosso and Marek, 1996). International research, including researches in India, are increasingly bringing out the evidence of the interdependent and complementary nature of health, nutrition and education factors in the context of overall development of the children. Observational studies done by Levinger (1996) have shown that a history of feeling hungry during school hours is associated with poor school achievement. A study done in Sweden reported that children who received adequate food at school performed better in tests of addition and creativity and were physically active than their counterparts (Scrimshaw and Schurch, 1999). So

“In-school Feeding” has been strongly recommended by international development agencies like UNICEF, CARE, WHO and FAO, in developed and developing nations. Food Assisted Education (FAE) not only increases children’s school participation and academic achievement but also supports their psycho-social development (McGovern, 2002).

MID DAY MEALS SCHEME (MDM)

Tamil Nadu has a long history of direct nutrition investments and is the only state in India that has officially started with the aim of creating a “malnutrition free state”. The nutrition programme of Tamil Nadu has a strong political commitment and is listed as one of the items of public expenditure (Government of Tamil Nadu, 1993). First of its kind in India, food assisted education called as Mid-Day Meals (MDM) programme was initiated in 1925, and administered to the poorest sections of the society in areas administered by the Madras Corporation. Rajan and Jayakumar (1992) analysed the school lunch programme in Tamil Nadu during the early 1980s. The results showed improvement in enrollment and the rate of attendance of children from the lower socioeconomic groups, including Muslim and other backward classes. Later, similar programmes were introduced by numerous other states. The long standing success of school meal schemes in states like Tamil Nadu and Kerala led to the formal launching of the mid-day meals in August 1995, as Nutritional Programme for Nutritional Support to Primary Education (NPNSPE) by the Government of India, as a centrally sponsored scheme. This programme was initiated with the twin objectives of enhancing the nutritional status and promoting primary education by influencing the decision of economically disadvantaged people to admit children in schools and retain them till they complete the primary school education cycle (Government of India, 2005). The Supreme Court issued legal entitlement in November 2001, to provide cooked mid-day meals in all the government and government aided primary schools in all states. In spite of the Supreme Court’s order, the mid-day meals scheme implementation across India was found to be only partially implemented in many states like Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Maharashtra, Orissa, Assam, Arunachal Pradesh, Nagaland, Manipur and Mizoram.

The MDM scheme should be considered as an integral part of the school system, otherwise it will be meaningless. An active meal programme should trigger all-round development of different essential components of

a good school system (Advancing Basic Education and Literacy, 1992). To facilitate further understanding on MDM scheme as an effective tool for promoting primary education in India and to universalise education as a part of Millennium Development Goals (MDG), a SWOT analysis on mid-day meals (Figure 1) was done by the researchers based on the information available from published reports and records.

FIGURE 1: SWOT Analysis of Mid-Day Meals

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Puts an end to class room hunger • Compensation for child labour • Promotes school participation • Prevents gender and caste discrimination 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Poor knowledge on sanitary practices • Lack of funds and school infrastructure • Mishandling of the resources • Low quality grains and pulses
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Increase in children's academic achievements • Psychosocial development of children • Community awareness and participation 	<p>THREATS</p> <ul style="list-style-type: none"> • Loss of teaching hours • Political influence • Complaints about students illness • Operational cost involved • Timely delivery of commodities

The analyses reveals that despite the strong strengths and opportunities of MDMs, some of the factors like loss of teaching hours, lack of funds, mishandling of resources, huge operational costs involved and difficulty in the timely delivery of the commodities are detrimental to the programme. Banerjee (2000) has also reported that despite the successes attributed by the FAE programmes in India, the net impact of the MDM scheme on the educational and nutritional status of primary school children is still under debate. Since the introduction of the programme, local news papers have published reports of children and teachers spending class hours fetching firewood and stirring pots of ghoogri instead of teaching and learning. Therefore, the success of the FAE programmes depends a great deal on efficient management. Incompetent management of MDM schemes can do more harm than good.

It is, hence, important to analyse the implementation and management of the MDM scheme across the Indian states. With this background in mind a preliminary study has been undertaken to draw the perceptions about the

MDM scheme in the states of Uttarakhand and Tamil Nadu with the objectives of

- studying the profile and perception about the MDM scheme from the beneficiaries and functionaries of the scheme in the states of Uttarakhand and Tamil Nadu;
- assessing the implementation of the MDM scheme at the school level in both the states; and
- examining the effect of the MDM scheme on the enrollment, retention and the rate of attendance in the selected primary schools of Uttarakhand and Tamil Nadu.

METHODOLOGY

According to Babbie (1989), the survey method is an excellent vehicle for measuring the attitudes and orientations in a large population. The present study is explorative in nature, so survey research using a self-designed questionnaire cum interview schedule was administered for collecting the perceptions about MDM scheme from the beneficiaries and functionaries.

Sampling

Purposive sampling was done to select two states — Tamil Nadu and Uttarakhand. These two states were chosen because Tamil Nadu is the fore runner of the MDM scheme and is the country's largest in terms of the number of beneficiaries covered (Swaminathan, Jeyaranjan, Sreenivasan and Jayashree, 2004) and Uttarakhand is a recently formed state, which is in a rapid developmental stage. Hence, a comparison between these two states will benefit other states to learn how to successfully implement the scheme. Convenience sampling was done to select Rurdapur block among the 7 blocks in Udham Singh Nagar district of Uttarakhand and similarly, Allanganalur block was selected from the 13 blocks of Madurai district in Tamil Nadu, as it was easily accessible for the researcher. A total of 10 primary schools from both the blocks (5 from each block) were indentified for the study (shown in Table 1).

Perceptions about the MDM scheme was collected from beneficiaries like children and parents and from functionaries like teachers, cooks and government employees working in the administrative offices like Block Research Centre (BRC), Crystal Research Centre (CRC), District Educational Training Centre (DIET) and Basic Shiksha Adhikari (BSA) office. Therefore, the total sample covers 430 respondents, with 370 beneficiaries and 60 functionaries.

TABLE1: Schools Selected for the Study

<i>S.No</i>	Schools in Uttarakhand	<i>S.No</i>	Schools in Tamil Nadu
1.	Rudrapur	6.	Allanganallur
2.	Nagla	7.	Achampatti
3.	Haldi	8.	Matupatty
4.	Matkotta	9.	Meenachipuram
5.	Patharchatta	10.	Aiyur

Field research consisted of unannounced visits to the schools to observe meal preparation and distribution. Semi-structured interviews with the government school teachers, cooks, primary school children and their parents were also conducted. Care was taken to ask questions in a non-suggestive manner. A separate check list was also used by the researcher, to assess the infrastructural facility and management of the school for evaluating the implementation of the MDM scheme at the school level. Apart from field notes, photographs were taken and video recording was done to document the responses given by the beneficiaries and functionaries during the interactive sessions. Data regarding the enrollment, retention and attendance were collected from the school records maintained by the management. Enrollment, attendance and retention rates were calculated for 5 years (2002-2007) using the standard formulas.

The Enrollment rate was calculated by assessing the total number of students admitted in the school each year.

Attendance rate was calculated by
$$\frac{\text{Total attendance in an academic session}}{\text{Number of days school opened in an academic session}} \times 100$$

The Retention rate was calculated by taking the enrollment in each class (from class II to V) as a percentage of enrollment in class I, without considering the new admissions and repeaters. It was derived from the student's flow diagram using Cohort Analysis.

Descriptive statistics using frequency and percentage analysis was done to tabulate the results obtained.

RESULTS AND DISCUSSION

In any field survey a clear understanding of the socioeconomic characteristics of the respondents will enable better interpretation of data. Table 2 shows the socioeconomic profile of the beneficiaries. In the present study, majority of the primary school children surveyed, fall under the age group of 10–14 years (39.6%). It was observed that 33.6% of the fathers and 54.8% of the mothers were uneducated and 40.4% of the children had a birth order of three. Most of the parents (58%) were occupied as assistants/clerks or labourers or farmers, and their family income was between Rupees 2000–5000 per month.

Perception of Beneficiaries

In Uttarakhand, only 21.6% of children were regular in attending school on all the working days, whereas in Tamil Nadu a large number of children (62%) were regular in attending all the working days in a week. Besides, expressing interest in school activities and fondness for a particular teacher, 21.6% of the children in Uttarakhand and 25.6% of the children in Tamil Nadu attributed the provision of free noon meals as a reason for attending school.

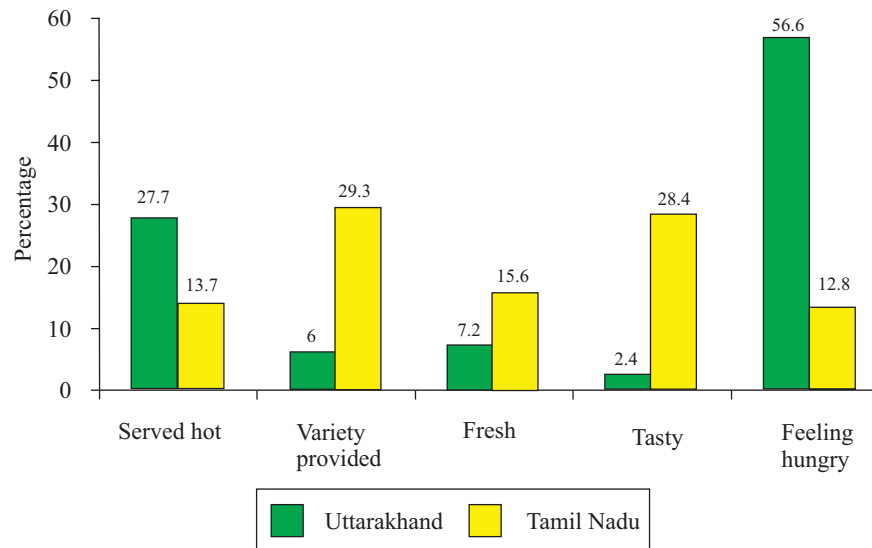
It is clear, that, a certain percentage of children in both the states come to school solely for mid-day meals. Most of the children in Uttarakhand (66.4%) and Tamil Nadu (87.2%) revealed their liking for the mid-day meals served. It is important to note that interest in classroom activities for Uttarakhand (63.2%) and Tamil Nadu (88.8%) children has increased due to the MDM scheme.

The reasons for children liking the mid-day meals is shown in Figure 2. Majority of the children in Uttarakhand prefer mid-day meals because they feel hungry (56.6%) and is served hot (27.7%), whereas in Tamil Nadu, majority of the children preferred mid-day meals because of the variety provided (29.3%) and tasty food (28.4%). The major reasons for dissatisfaction with mid-day meals among children in Uttarakhand was tasteless food (39.3%) and food not cooked well (33.3%). In Tamil Nadu, the percentage of children who were dissatisfied with the mid-day meals was comparatively low. Totally, 53.6% of Uttarakhand children and 81.6 % of Tamil Nadu children were satisfied with the mid-day meals.

TABLE 2: Socioeconomic Profile of the Beneficiaries

<i>Variables</i>	<i>Category</i>	<i>N=250</i>	<i>%</i>
Age	>6 yrs	60	24.0
	6-10 yrs	91	36.4
	10-14yrs	99	39.6
Gender	Male	138	55.2
	Female	112	44.8
Ordinal position	1	27	10.8
	2	63	25.2
	3	87	34.8
	>3	73	29.2
Father's education	Uneducated	84	33.6
	Primary	99	39.6
	High school	47	18.8
	Intermediate	20	8
	Graduation	–	0
Mother's education	Uneducated	137	54.8
	Primary	82	32.8
	High school	18	7.2
	Intermediate	13	5.2
	Graduation	–	0
Family income (per month)	<2000	73	29.2
	2000-5000	146	58.4
	5000-8000	31	12.4

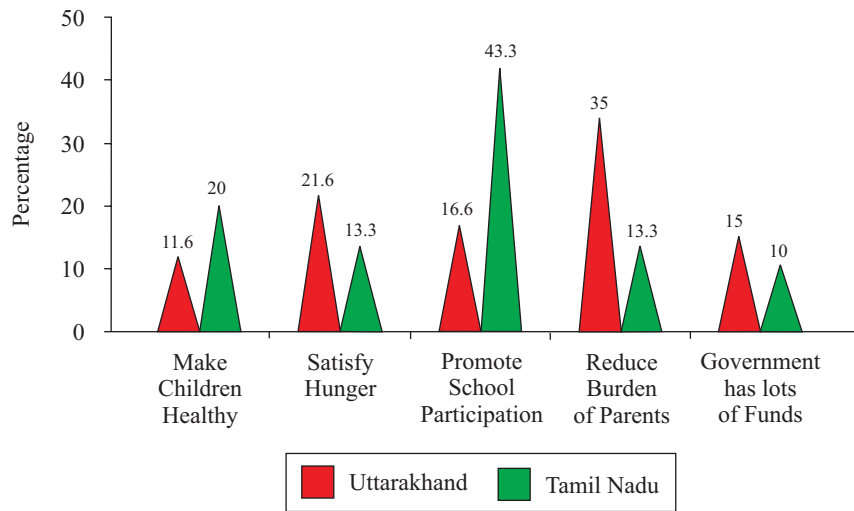
FIGURE 2: Reasons for Liking Mid-Day Meals



Parents of the primary school children are the indirect beneficiaries of the MDM scheme, since mid-day meals help to liberate working women from the burden of feeding their children at home during the day (Ravillion and Wodon, 2000). The same can be confirmed from the responses of the parents in Uttarakhand, as a majority (35.0%) opined that mid-day meals were introduced by the government to reduce their burden, whereas in Tamil Nadu, majority of the parents (43.3%) were aware that the government's intention to provide mid-day meals was to promote school participation. Figure 3 depicts the parents' opinions about the government's intention to provide mid-day meals to their children. Parents in Uttarakhand stated that they send their children to school because it is difficult to manage them at home (31.6%) and 25.0 percent of the parents responded that sending their children to school costs them nothing as food, books and uniforms are provided free of cost. In contrast, Tamil Nadu parents (28.3%) responded that, primary education is necessary to make their children literate and 26.6 percent answered that imparting education to their children will provide them with a better future. Parents in Uttarakhand (70.0%) and Tamil Nadu (85%) accepted that providing mid-day meals is a good incentive for sending their children to school. A high level of satisfaction with the MDM scheme was found among both the parents in Uttarakhand (80.0%) and Tamil Nadu (90.0%). The Uttarakhand parents demanded for more variety

in the weekly menu and suggested inclusion of seasonal fruits and vegetables. In Tamil Nadu, majority of the parents requested for good quality of grains. They were satisfied with the other parameters.

FIGURE 3: Opinion about the Government's Intention to Provide Mid-Day Meals to their Children



Perception of Functionaries

Resourceful administration at the government level and at the school level is important for the successful running of the MDM scheme. This study considered government officials as potential participants in adopting a pragmatic approach in the management of the MDM scheme. All the officials (100%), both in Uttarakhand and Tamil Nadu agreed that the monitoring and evaluation of the functioning of the MDM scheme is regularly conducted by government officials. Table 3 lists the perceptions of the government officials about the MDM scheme. With respect to the management of the MDM scheme, 60% of the officers in Uttarakhand suggested that the scheme should be privatised, while the remaining 40% answered that the teachers and cooks be provided with better training. In Tamil Nadu, all the officers recommended an increase in the allotment of funds per child and better school storage facilities.

Teachers are the key promoters of any scheme that benefits school children. The success of the MDM scheme, depends on how it is looked upon by the school authorities and how it is implemented at the school. Majority

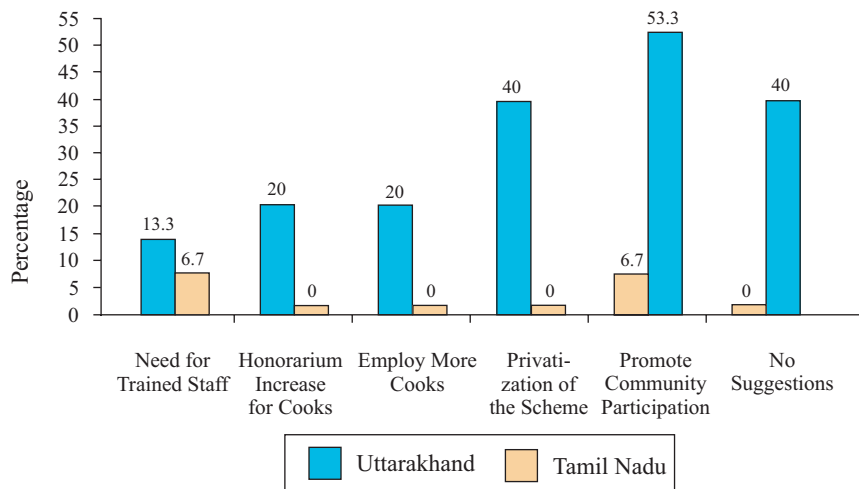
of the teachers in Uttarakhand (33.3%) and Tamil Nadu (40%) were of the opinion that, the MDM scheme was introduced to enhance the school enrollment, attendance and retention rates. In Tamil Nadu, 100% of the teachers reported that the mid-day meals are provided regularly, proper accounts are maintained and periodic monitoring of the scheme is undertaken by government officials. Similarly, a large number of teachers stated that ingredients were delivered regularly (86.7%), variety of dishes were provided in the weekly menu (80%) and regular evaluation of the MDM scheme was conducted by the School Management Committee (SMA) and Parents Teachers Association (PTA).

TABLE 3: Perception of Government Officials about Mid-day Meals Scheme

<i>Particulars</i>	<i>Uttarakhand</i>		<i>Tamil Nadu</i>	
	<i>Yes (%)</i>	<i>No (%)</i>	<i>Yes (%)</i>	<i>No (%)</i>
Mid-day meal scheme is meeting its objectives as per the government's intention	80	20	100	0.0
Mid-day meal scheme has increased the school participation among the children	100	0.0	100	0.0
Satisfied with the implementation of the Mid-day meal scheme	60	40	100	0.0
Training should be given to the teacher and cook	80	20	40	60
There is regular monitoring and evaluation of the scheme by local government	80	20	100	0.0

Figure 4 highlights the suggestions given by school teachers to improve the MDM scheme. Majority of the teachers in Uttarakhand (40%) recommended for the privatisation of the MDM scheme, and 60% of the teachers complained that the MDM scheme was a burden to manage and impinged on their teaching programmes. In contrast, the Tamil Nadu teachers (80%) had no complaints on the MDM scheme.

FIGURE 4: Suggestions of Teachers to Improve the MDM Scheme



Cooks are directly involved in the preparation and service of mid-day meals. The successful implementation of the scheme at the school level is largely dependent on their devotion to work and work satisfaction. Table 4 shows the perceptions of school cooks about the MDM scheme. Majority of the cooks in Uttarakhand replied that they disliked their job (60%) and were dissatisfied with the salary (100%). In contrast, Tamil Nadu cooks liked the job (90%) and were satisfied with their salary (80%). Majority (60%) of the cooks in Uttarakhand reported that they were paid a low salary and burdened with excess work. Whereas in Tamil Nadu, majority of the cooks (60%) stated that they had no difficulties in fulfilling their tasks.

Implementation of the Mid-day Meal Scheme at the School Level

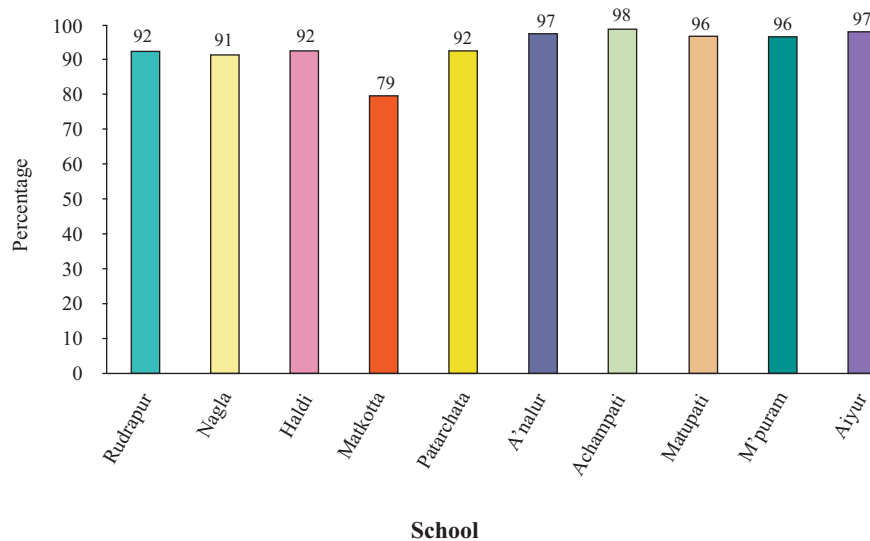
The implementation level of the MDM scheme was assessed in all the ten schools under study, in both the states of Uttarakhand and Tamil Nadu. It was done using standard rating in the checklist, giving equal weightage to the availability of infrastructural facilities in class rooms, cooking space, storage area, presence of management committee for mid-day meals, concern of the teachers and student’s satisfaction on the MDM scheme. Figure 5 shows the implementation level of the MDM scheme in the schools of Uttarakhand and Tamil Nadu. It was observed, that, barring one school in Matkotta, Uttarakhand, the infrastructural facility in all the schools were upto the mark. The school building in Matkotta, Uttarakhand was dilapidated and the children were made to sit outside the class rooms. All

the schools in both the states had hand pumps for drinking water, except for Nagla in Uttarakhand and Achampatti in Tamil Nadu which had purified tap water. Schools in Uttarakhand had no proper storage facilities, whereas schools in Tamil Nadu had storage rooms for stocking grains. All schools had a management committee for the implementation of the MDM scheme. However, schools in Tamil Nadu welcomed suggestions made by parents on mid-day meals during the PTA meetings. All the schools in both the states provided meals for children on all working days. The officials from different government departments for checking and monitoring of the mid-day meals made daily visits to schools in Tamil Nadu. Moreover, when compared to schools in Uttarakhand, the schools in Tamil Nadu were observed to have maintained proper records and bank accounts for the efficient management of the scheme.

Similar results have been reported by Afridi (2005) in the states of Madhya Pradesh and Karnataka. When compared to Madhya Pradesh, the higher attendance rate in Karnataka was attributed to better management and implementation of the MDM scheme.

TABLE 4: Perceptions of School Cooks about MDM Scheme

<i>Particulars</i>	<i>Uttarakhand</i>		<i>Tamil Nadu</i>	
	<i>Yes (%)</i>	<i>No (%)</i>	<i>Yes (%)</i>	<i>No (%)</i>
Like the job	40	60	90	10
Satisfied with the salary	–	100	80	20
Regular visits made by the government officers to monitor the cooking process	40	60	100	–
Are children content with the portions served	70	30	90	10
Do children assist in cooking	80	20	–	100
Hygienic practices followed during cooking	40	60	90	10
Checking for grain infestations before cooking	70	30	90	10

FIGURE 5: Implementation of the MDM Scheme in the Schools

Effect of the Mid-day Meal Scheme on Enrollment, Attendance and Retention Rates

To study the effect of the MDM scheme on school participation in the selected schools of Uttarakhand and Tamil Nadu, the increase in enrollment, attendance and retention rates of the children from 2002–2007 was calculated using the standard formulas. The percentage increase in enrollment, attendance and retention rates of the ten selected schools are listed in Table 5.

It was observed that the number of children enrolled in the selected schools of Uttarakhand and Tamil Nadu is increasing. The Matkotta School is an exception and this can be attributed to the poor infrastructural facilities. The attendance rates in all the selected schools have increased during the last five years. In Uttarakhand, Patharchatta Primary School, which has the highest attendance rate, the attendance has increased from 80.82 to 82.94% (2.12% increase) and the school in Matkotta with the lowest attendance rate, has registered an increase from 78.3 to 80.07% (1.77% increase) in the past five years. Similarly, in Tamil Nadu, Allanganallur Primary School, which has the highest attendance rate, attendance has increased from 88.49 to 92.76% (4.27% increase) and the school with the lowest attendance rate, the Aiyur Primary School, has registered an increase from 83.62–85.81% (2.19% increase) between 2002–2007. It was observed that the retention rate in the schools of Uttarakhand varied from

TABLE 5: Enrollment, Attendance and Retention Rates

Parameters	Uttarakhand					Tamil Nadu				
	R'pur	Nagla	Haldi	Matkota	P'chata	A'nalur	A'pati	M'paty	M'puram	Aiyur
Enrollment (Increase in percentage)	16.96	16.00	1.51	-52.45	56.86	17.86	26.62	95.34	88.35	5.25
Attendance (Increase in percentage)	1.63	1.55	1.30	1.77	2.12	4.27	2.55	2.12	2.21	2.19
Retention (Increase in percentage)	43.47	38.04	50.00	20.63	34.78	81.35	77.63	84.21	80.76	77.04

Note: *Reference from: 2002–2007 (5 years)

20.63–50.00%. Matkotta Primary School had the lowest retention rate of students (20.63%) and the Haldi Primary School had the highest retention rate of students (50%). In Tamil Nadu the retention rates were comparatively high as it ranged from 77.04% to 84.21%. The lowest retention rate was found in Aiyur Primary School (77.04%) and the highest was in Panchayat Union Elementary School in Mattupatty (84.21%).

The results can be supported by the study of Misra and Behera (2003) regarding the positive impact of Nutritional Support to Primary Education (NSPE) Programme on the growth of enrollment, attendance, retention and the reduction of dropouts among children in primary schools in Orissa and Tamil Nadu, between pre-MDM period (1989–90 to 1994–1995) and post-MDM period (1995–1996 to 1998–1999). There was an observed improvement in average annual growth rate of enrollment, percentage point increase in attendance and retention rates.

CONCLUSION

The study shows that the perception about the MDM scheme among the beneficiaries and functionaries of Tamil Nadu is better than that of Uttarakhand. The various factors contributing to this difference has been thoroughly analysed and discussed in this article.

The school participation in Tamil Nadu schools has increased considerably in the past few years due to the introduction of Activities Based Learning (ABL). Such an education system combined with nutritious food has proved to be an attractive incentive for retaining the children's interest in classroom activities. This can be attributed as the main reason for the overall satisfaction and positive attitude of beneficiaries and functionaries towards the MDM scheme in Tamil Nadu. In Uttarakhand, the mid-day meals are tasteless and do not offer any variety. Even though the food is not appealing, children eat the food to satiate their hunger. Most of the school-going children skip their breakfast and are wholly dependent on the free noon meals. Although, the reasons for sending their children to school varied considerably between the parents of Uttarakhand and Tamil Nadu, a significant number of parents across both the states reported that sending children to school did not cost them anything as meals, books and uniforms are provided free of cost.

Most of the functionaries in Uttarakhand recommended privatization of the scheme, as they were unable to provide variety and quality demanded by the children and their parents. It was found that in Uttarakhand most of

the teachers were dissatisfied with the mid-day meals. They complained that it adversely affected the teaching-learning process because of the additional burden of maintaining accounts. On the contrary, in Tamil Nadu all such activities were managed by a specially appointed person known as the 'Organiser'. He is responsible for regular updating of the mid-day meals register, attendance of students, amount of grains utilised per day, daily expenditure on fresh vegetables and fruits, daily fuel expenses and the maintenance of bank accounts for the MDM scheme, and so on. So the scheme management is more organised and structured in Tamil Nadu schools than in Uttarakhand schools. Therefore, the high enrolment, attendance and retention rates in the schools of Tamil Nadu can be attributed to the efficient management of the MDM scheme and the positive attitude of the beneficiaries and functionaries. Moreover, as per the government's instructions, no examinations were conducted for children till 'Standard V' and no child was detained in any class at the primary school level. However, the schools in Uttarakhand, detained a considerable number of students every year and this led to an increase in the retention rate.

The MDM scheme in Uttarakhand can emulate the model adopted by the schools in Tamil Nadu. The researchers recommend the involvement of the local governing bodies like the Gram Panchayat and the Village Education Committee for efficient management of the MDM scheme including cooking, serving and cleaning operations. Community participation and employment opportunities can be enhanced through the involvement of women SHGs and retired school teachers in the monitoring of mid-day meals.

THE IMPLICATIONS OF THE STUDY

An important lesson gained from the comparative study between the two states of Uttarakhand and Tamil Nadu on the perceptions of the MDM scheme is that, though both the states have access to similar government funds and guidelines, efficient implementation of the scheme is largely dependent on the attitude and involvement of the beneficiaries and functionaries. Hence, instead of pouring additional funds into the scheme, it is important to address these issues on a priority basis. The study strongly calls for political and public support from all concerned states for successful implementation of the scheme. This study also contributes to the development of suitable policy framework for better administration of the

scheme. States like Uttarakhand, can benefit by adopting the model used in Tamil Nadu, the fore runner of the MDM scheme.

REFERENCES

- Adelman, S. Gilligan, D.O. and Lehrer K. : *A Review of the Economics of Food for Education Programs*, Washington: International Food Policy Research Institute. 2006
- Advancing Basic Education and Literacy : *School Feeding Programs and Educational Achievement*, Washington. 1992
- Afridi, S. : Problems of Wastage in School Education: Dropout at Elementary Level, *Journal of Educational Planning and Education*, 5(2), 173–183. 2005
- Aruna, C. : Vitalization of Elementary Education: Some Aspects of Rural Schooling, *Journal of Indian Education*, 29(6), 58–62. 1994
- Babbie, E. : *The Practice of Social Research*, Belmont: Wadsworth Publishing Company. 1989
- Banerjee, A.V. : *Promoting School Participation in Rural Rajasthan: Results from Some Prospective Trails*, Udaipur: Seva Mandir. 2000
- Herz, B. and Sperling, G. : *What Works in Girls' Education: Evidence and Policies from the Developing World*, New York: Council on Foreign Relations. 2004
- India: Ministry of Human Resource Development : *National Programme of Nutrition Support to Primary Education (Mid-Day Meal Scheme)*, New Delhi. 2005
- Levine, R. Birdsall, N. Ibrahim, A. and Dayal, P. : *Achieving Universal Primary Education by 2015*, Washington: Millennium Project Task Force on Education. 2003
- Levinger, B. : *Nutrition Health and Education for All*, New York: United Nations Developmental Program. 1996
- McGovern, G. : *Our Healthy Future: The Global Context*, Rome: Food and Agriculture Organisation. 2002
- Misra, S. N. and Behera, M. : Child Nutrition and Primary Education: A Comparative Study of Mid-Day Meal Programme in Orissa and Tamil Nadu, *Indian Journal of Social Development*, 3(2), 267–269. 2003
- National Institute of Nutrition : *25 Years of National Nutrition Monitoring Bureau*, Hyderabad. 2006
- Pandey, R. : A Study of Factors Causing School Dropouts, *Journal of Indian Education*, 23(3), 31–37. 1997

- Rajan, S.I. and Jayakumar, A. 1992 : Impact of the Noon Meal Programme on Primary Education: An Exploratory Study in Tamil Nadu, *Economic and Political Weekly*, 27(43), 2372–2380.
- Ravillion, M. and Wodon, M. 2000 : Does Child Labor Displace Schooling? Evidence on Behavioral Responses to an Enrollment Study, *The Economic Journal*, 110(462), 158–175.
- Rosso, D. and Marek, T. 1996 : *Class Action, Improving School Performance in the Developing World Through Better Health and Nutrition*, Washington: World Bank.
- Scrimshaw, V. and Schurch, A. 1999 : The Role of School Feeding in Psychomotor and Cognitive Development, *British Medical Bulletin*, 55(3), 511–527.
- Sharma, R.C. and Sapre, C.L. 1980 : *Wastage and Stagnation in Primary and Middle School in India*, New Delhi: National Council of Educational Research & Training.
- Swaminathan, P. Jeyaranjan, J. Sreenivasan, R. and Jayashree, K. 2004 : Tamil Nadu's Midday Meal Scheme: Where Assumed Benefits Score over Hard Data, *Economic and Political Weekly*, 39(44), 4811–4821.
- Tamil Nadu: Department of Social Welfare and Noon Meal Programme 1993 : *Tamil Nadu State Policy on Nutrition*, Chennai
- The PROBE Team 1999 : *Public Report on Basic Education in India*, New Delhi: Oxford University Press.
- United Nations Educational, Scientific, and Cultural Organization 2000 : *Education for All Assessment-Statistical Document*, Paris.
- United Nations International Children's Emergency Fund 1998 : *Strategies for Eliminating Child Labour: Prevention, Removal and Rehabilitation*, New York.
- World Food Programme 2000 : *Girls on the Frontline: Take Home Rations for Girls Education*, Rome.