

Midday Meals in Two States

Comparing the Financial and Institutional Organisation of the Programme

This article is based on the findings of a recent survey of the midday meal programme in Madhya Pradesh. Comparison of the new 'suruchi bhojan' with the old 'daliya' programme in the government primary schools in the survey area and observations on programme implementation in Karnataka, suggest a pressing need to overhaul the administrative and financial organisation of the scheme in order to increase its effectiveness. Urgent improvements in the nutritive content of meals and related infrastructure requires earmarked funds and a transparent and representative agency, for effectively implementing and monitoring the scheme, at the grassroots level.

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I Introduction

The fundamental challenge of human development in India is the provision of primary education and basic health services to its large and increasing proportion of young population.¹ In 1998-99, only 83 per cent of boys and 78 per cent of girls in the 6-11 age group were enrolled in a primary school, according to the National Family Health Survey of India. Thirty-five million children in the age group of 6-14 years are out of school and an equal number do not complete even five years of schooling. Ironically, the elementary education system of India is one of the largest in the world. There are about 150 million children officially enrolled in nearly 8,00,000 schools throughout the country. Relatively high overhead costs of schooling coupled with poor school infrastructure, lack of teachers and teacher absenteeism are the most often cited reasons for low levels of schooling in the country.²

A dismal health record accompanies the low levels of educational attainment in the country. Nearly 50 per cent of children, less than five years of age suffer from moderate to severe malnourishment. Undernourishment is particularly severe in Bihar, Madhya Pradesh and Uttar Pradesh.³

In several developing countries supplementary feeding programmes have been used as a tool to not only directly improve nutrition but also influence a variety of other non-health outcomes of the target population. Experimental and survey studies have shown a direct effect of nutrition on labour productivity. A more healthy and educated population is also associated with a higher level of economic development and growth. Improvement in nutrition levels of school age children potentially increases enrolment, reduces absenteeism, improves test scores and lowers dropout rates.⁴

Understanding this link between health and educational outcomes, the government of India launched the National Programme of Nutritional Support to Primary Education or the Midday Meal Scheme, in August 1995. The school meal scheme is an implicit food subsidy to poor families. At very low per pupil per day cost (varying between Rs 0.50 and Rs 5, depending on the quality of the cooked meal) the scheme could potentially alter tradeoffs in parents' decisions regarding the schooling of their children. The programme increases the benefits of schooling by promising improved nutritional status of the participating child and thereby, lowers the opportunity cost of attending school. With 98 million potential beneficiaries of this programme, it may well be one of the largest nutrition support schemes in the world.

Socio-economic surveys have shown that the programme has been effective in improving enrolment rates particularly of girls [Dreze and Goyal 2003]. However, not all the states have implemented the programme yet, especially the more populated and backward states like Bihar and Uttar Pradesh, citing lack of financial resources. The new central government (UPA) has committed itself to prioritising basic education as well as renewing the emphasis on the scheme by ensuring its implementation throughout the country. Towards this end, the 1 per cent education cess imposed in the last budget is aimed at increasing the allocation of resources to improve standards of elementary schooling in the country. However, the institutional and financial structure of public programmes is crucial for their effective implementation and in obtaining the desired results. Based on data on the midday meal programme in Madhya Pradesh and in Karnataka, this article highlights the need for earmarked funds towards the school meal programme and creation of social institutions at the grassroots level to ensure the effectiveness of this programme in meeting the stated aims of the policy.

II Midday Meal Programme in Madhya Pradesh

The midday meal survey was conducted in January and February 2004, in Chindwara district of Madhya Pradesh. The surveyed district is located in south central Madhya Pradesh and is one of the largest in the state with a population of more than 1 million in 2001. Nearly 60 per cent of children in this part of the state are undernourished according to the NFHS, higher than the national average of 47 per cent.⁵ The district is subdivided into 11 blocks, four of which are officially designated tribal blocks. The survey was conducted in a non-tribal block of the district, approximately 39 per cent of whose population is tribal and the total literacy rate was 24 per cent in 1991. Within the sampled block, 41 villages were chosen randomly for the survey. Within each village 15 households, which had a child in the age group of 5-12 residing in it, were surveyed through systematic random sampling. Each enrolled child was then linked to the government and private primary schools in and around the village. Information of the implementation of the meal scheme was obtained from the panchayat secretaries as well as the school authorities. Thus, a total of 615 households, 74 primary schools (both public and private) and 35 village panchayats were covered in the survey.

Madhya Pradesh was one of the earliest states to implement the school meal programme. In October, 1995 the programme was initiated in the government and government-aided primary schools in 174 tribal and 123 non-tribal blocks of the state on a pilot basis. However, in 1997, the state government discontinued provision of cooked meals in the non-tribal blocks and instead directed them to distribute raw foodgrains every month, due to lack of resources to implement the programme. The state government re-initiated the cooked meals in the non-tribal blocks in February 2002. However, most schools were providing raw foodgrains at 2 kilos per month to all enrolled students, equivalent to 100 grams of foodgrains provided under the cooked meal programme for 200 school days, before the beginning of the academic year in July 2003. The reasons for the delayed implementation of the scheme must be understood in the background of the administrative and financial organisation of the scheme in the state.

In Madhya Pradesh, panchayats have the primary administrative and financial responsibility of implementing the school meal programme in all the villages within its purview. The responsibilities of the panchayats include (i) procurement and transportation of foodgrain from the nearest public distribution shop to the government primary school; (ii) provision of infrastructure for providing cooked meals such as kitchen sheds; (iii) storage of foodgrains; (iv) milling of raw foodgrains; (v) purchase of ingredients such as fuel, salt, condiments and other inputs and to ensure the good quality of materials purchased; (vi) arrangement for cook or helper for preparing the meals; (vii) regular and timely provision of rations to the cooks as per the school enrolment records; (viii) ensure that the food is cooked in hygienic and clean conditions; and (ix) maintain a regular record of inventory and expenditure on ingredients.

The village education committee and the parent teacher association of the school are also expected to monitor and supervise the implementation of the programme. However, these institutions are neither active participants in the process nor do they have the financial teeth to make their voices heard.

There are two main annual sources of funds for the panchayats: grants tied to central government schemes such as the SGRY

programme and untied grants or 'moolbhoot rashi' devolved by the state finance commission, the former being the largest source of funds. The panchayat can raise its own resources through local tax revenues but this constitutes a negligible amount. Allocation of funds is in proportion to the total population and the percentage of backward and tribal population in each panchayat. In Madhya Pradesh, the panchayats have the freedom to use the moolbhoot rashi on development projects identified by them. It is widely perceived that accountability of the panchayat to its electorate is very low and there is widespread corruption in the utilisation of funds.

The administrative and financial structure of the programme differs in the tribal and non-tribal areas in Madhya Pradesh. Until 1997, Rs 0.75 per student per school day was provided directly to the panchayats for conversion of raw grains into cooked meals in both targeted tribal and non-tribal blocks.⁶ Since then, the department for tribal welfare has been providing earmarked funds for the school meal programme only to the panchayats in the tribal blocks. In the non-tribal blocks, the cost of converting the raw foodgrains is met by the annual moolbhoot rashi. Guidelines provided by the state government in 2003, permitted the panchayats in the non-tribal blocks to spend at most Rs 0.60 per child per school day, which included the cost of ingredients, fuel and the cook's salary. It is important, therefore, to note that the financial resources and the political will of the panchayats determines whether the school meal scheme is implemented as well as the quality and administration of the programme.

In November 2003 the newly elected state government decided to initiate an improved school meal programme on a pilot basis in identified backward blocks in the state from February 1, 2004. Under the new school meal programme, the panchayats in the targeted blocks were to spend one-third of their moolbhoot rashi at the rate of Rs 1.25 to Rs 1.30 per student per school day on the new scheme. The surveyed census block was one of the 120 backward blocks in which the new meal programme was introduced on a pilot basis. The cost of the new programme is almost double of the previous one, considerably increasing the load on the limited financial resources of the panchayats. Based on the total enrolment data of approximately six million in September 2003 in rural Madhya Pradesh alone, the expenditure by the state government on the provision of cooked meals would work out to approximately Rs 3.6 million/day under the old scheme and up to Rs 7.8 million/day under the new scheme. This amounts to a huge burden on the state exchequer.

Table 1 compares the cost structure of the old daliya programme and the new suruchi bhojan programme introduced in February.

Table 1: Cost Structure of Midday Meal Programme in Rural Areas
(Rs per 100 students per day)

Expenditure Category	Midday Meal Programme		
	Daliya	Suruchi Bhojan	
		Roti-dal	Roti-sabzi
Milling of wheat	9.50	10	10
Pulses	0	50	0
Oil	11	5	15
Sugar	13	0	0
Milk	0	0	0
Vegetables	0	0	30
Salt and spices	1.50	15	20
Total cost of ingredients	35	70	75
Fuel	8	10	10
Cook's salary	15	40	40
Total variable cost	58	130	125

Source: Department of Panchayat and Rural Development, Government of Madhya Pradesh.

The quality of the two programmes can be gauged from the total expenditure on ingredients by the panchayats. Under the suruchi bhojan, there are two items in the menu. The cost of salary is also higher because the panchayats are expected to engage two cooks, instead of one in the daliya programme, since making rotis is expected to be more tedious and time consuming. From the reactions of panchayat secretaries during the survey, the impression was that the cost estimates for the suruchi bhojan are lower than the prevailing market price of ingredients, particularly vegetables and pulses. Providing quality meals within this budget estimate, might therefore, prove difficult for the cash strapped panchayats.

Implementation of Programme in Surveyed Census Block

Intensity and regularity of the scheme: In the surveyed census block, most schools initiated the cooked meal programme in the 2003 academic year. The school year in Madhya Pradesh is for ten months, beginning in July. Thus, data on the daliya programme was collected from the school records maintained by the headmasters for July and December month in order to evaluate the immediate response of the panchayats. Table 2 presents the time line of programme implementation in the block. Of the 63 government primary schools surveyed, more than 60 per cent of the schools implemented the midday meal programme only after

Table 2: School Level Implementation of Daliya Programme (2003-04)

	Public Primary Schools		
	Government Primary School	Education Guarantee School	Religious/Aided School
Total Number of schools	49	13	1
Per cent of schools which implemented scheme in July	24.5	38.5	100
Per cent of schools which implemented scheme between July and December	67.3	53.8	n.a
Per cent of schools which did not implement scheme	8.2	7.7	n.a
Regularity of Programme in July*	0.18	0.26	0.81
Regularity of Programme in December*	0.86	0.86	1.00

Note: * proportion of schools days meals were served during the month.
Source: Midday Meal Survey, Chindwara.

Table 3: Panchayat Expenditure on Daliya Programme (Rs per month per student)

Total Cost of Ingredients (Rs)	Per Cent of Panchayats
0 – 2.00	16.88
2.01 – 4.00	6.93
4.01 – 6.00	4.65
6.01 – 8.00	32.39
8.01 – 10.00	11.80
>10.00	17.34

Source: Midday Meal Survey, Chindwara.

Table 4: Quality and Expenditure on Midday Meal Programme

Type of Programme	Per Cent of Schools	Average Calories per Meal (Kcal)	Average Cost of Ingredients (Rs/100 Students/Day)
Daliya without oil and jaggery	16.07	138.40	9.50
Daliya with oil and no jaggery	0.05	174.40	20.50
Daliya with oil and jaggery	78.57	193.55	58
Variation in meal	72	193.55	58

Source: Midday Meal Survey, Chindwara.

the beginning of the school year in July 2003. Of those which did implement the scheme in July itself, the regularity of the programme was extremely poor and interrupted. There seems to have been an improvement in the implementation of the programme by December, mostly due to more effective and regular monitoring by the district administration. However, the intensity of the programme is not yet 100 per cent. Panchayat officials used various arguments to explain the irregularity of the programme – grain stocks running out, cooks on holiday or delays in receiving permits to obtain the grain allocation from the PDS shops particularly during the monsoon. There remained five schools which continued to distribute only dry rations through December.

Programme Expenditure

The survey gathered data on the average expenditure by the panchayats since July on each ingredient for the cooked meal programme from the panchayat secretaries who maintain the accounts. This information was also cross-checked with the school records. Expenditure data was gathered only for the daliya programme since the suruchi bhojan had just started and reliable estimates of average monthly expenditure could not be obtained because the programme had been initiated recently.

From Table 1, the per child per cost of the daliya programme for a 20 day school month should be at least Rs 7. 47 per cent of the panchayats were spending less than this officially mandated expenditure in the survey area. The expenditure information obtained from the Panchayat secretaries in Table 3 is most likely to be upward biased if the data is cross-checked with the information obtained from the cooks and due to the irregularity of the meals.

Quality of the Cooked Meals Programme

According to the Supreme Court judgment on the PIL on the midday meal scheme in November, 2001, each enrolled child is entitled to at least 300 kcal of a cooked meal on a school day. Though the implementation of the programme improved, as the academic year progressed, the quality of the daliya programme was extremely poor in the surveyed area. In some schools, children were being served only boiled daliya with no salt or jaggery added to the meal. In addition the quantity of the meal was also small. Table 4 categorises the types of meals served by the schools in the last seven days before the survey interview. The data is based on the household survey of daily food consumption of primary school age children using the 24 hour recall method.⁷ The calorie intake reported in column 3 is averaged over all children who ate the school meal on the reference day. Though all schools were mandated to provide sweet and salty daliya on alternate school days, most panchayats were cutting costs by serving sweet daliya once a week or a few days in a month.

Under the initial school feeding programme, schools were expected to provide 100 grams of wheat daliya (sweet and salty on alternate school days) such that a total of 413.80 kcal and 8.20 grams of protein are provided per student per school day in the wheat eating areas. With the initiation of the new pilot programme in 120 of the most backward blocks of the state in February, the targeted schools were to provide all enrolled children with 100 gm of roti along with either 60 grams of vegetables or 20 grams of dal per child per school day.⁸ The schools are expected to switch the menu after every 10 school days. The consumption data on the cooked meals programme obtained from

the household interview was cross-checked with the observations of the field workers on the quantity and quality of the meals served at school on the school interview day. Using this information from school and household survey, Table 5 shows that the daliya programme fell far below the requisite standards of an attractive meal programme which could have an impact on raising attendance and enrolment. In contrast, the new initiative of suruchi bhojan was providing children with much higher calories and was, therefore, potentially more attractive to them.

The surveyed population's daily calorie consumption is below the recommended daily allowance (RDA) as shown in Table 6. The school meal programme can, therefore, play a vital role in this part of the country. However, the daliya programme may not provide a sufficient food subsidy to attract more students to school and alter parents decisions regarding schooling of their children, particularly for older children and boys. The suruchi bhojan, on the other hand, forms a larger proportion of the recommended daily intake of primary school children and may be more successful in increasing school participation rates.

Infrastructure Facilities

The long-term viability and success of this programme must be linked to the provision of basic infrastructure required for efficient implementation of the programme such that there is minimum distraction to the teachers as well as the students due to the programme. Unfortunately, of all the school surveyed, not one had a separate kitchen or a shed for cooking the meals. In most of the schools an abandoned room in the school building itself was being used for preparing the meals. In the case of EGS schools which did not have a school building, the classes were usually being held in either in the teacher's or the cook's house. Since firewood was the fuel used throughout the survey area for preparing the school meals, there would be a lot of smoke in the classrooms during meal times, distracting students from their studies.

Some panchayats had provided eating utensils but they were not enough for all the students. The students usually brought their own plates and bowls from home and those who did not, would eat on paper torn from their school notebooks. However, cooking utensils had been provided by all the panchayats in the schools. Drinking water facility was there in most schools usually in the form of a hand pump close by where the children would wash before and after the meal while some panchayats had provided steel buckets for storing water in the school itself.

III

Qualitative Response of Households

The analysis suggests that the panchayats were trying to cut back on the cost of the programme in myriad ways. The survey, therefore, attempted to gauge the impressions of the programme from the parents of the participating children themselves. Parents were asked whether they were satisfied with the programme and if not what the reason for their dissatisfaction was.⁹ According to table 8, more than 60 per cent of the respondents were satisfied with the daliya programme, while the response for the suruchi programme was higher at 80 per cent. The response rate did not vary significantly between households below and above the poverty line. Parents were also asked what in their opinion should be provided under the Midday meal programme in the child's

school.¹⁰ Fifty-four per cent of the respondents whose child was getting daliya in school preferred dry rations compared to 30 per cent under the suruchi bhojan programme.

The primary reason for dissatisfaction with the cooked meal programme was the blandness of the meals and the small quantities being served at school, as documented in Table 9. The response of the parents re-emphasises the need for improving the quality of the programme in order for it to have a significant impact on the schooling and health of the target population. Thus, the stipulation of a minimum level of quality of the meals and

Table 5: Mean Quantity of Nutrients Provided to Children from School Meals

Nutrients per Meal	Daliya Programme	Suruchi Bhojan
Energy (kcal)	185.41	362.96
Protein (gram)	5.31	12.06
Fat (gram)	3.57	4.41
Carbohydrates (gram)	32.94	68.82
Calcium (milligram)	18.85	50.34
Iron (milligram)	2.40	4.84
Vitamin A (microgram)	7.90	10.34

Source: Midday Meal Survey, Chindwara.

Table 6: Proportion of Recommended Dietary Allowance (RDA) Provided by School Meals

Age Group	RDA (kcal)	Average Daily Calorie Intake (kcal)	RDA from Daliya (Per Cent)	RDA from Suruchi Bhojan (Per Cent)
5-6	1690	1069.5	11.0	21.5
7-9	1950	1324.6	9.5	18.6
10-12 (boys)	2190	1499.0	8.5	16.6
10-12 (girls)	1970	1365.8	9.4	18.4

Note: Column 3 figures are based on survey data. Mean calorie provided by school meals in Table 5 has been used to calculate columns 4 and 5.

Source: Midday Meal Survey, Chindwara. RDA based on the Indian Council of Medical Research figures.

Table 7: Infrastructure Facilities for the Midday Meal Programme

Infrastructure	Per Cent of Schools	Average Expenditure by Panchayats (Rs)
Kitchen shed	3.28	0
Gas stove	0	0
Eating utensils	6.56	na
Cooking utensils	100	984
Drinking water	25.68	197

Source: Midday Meal Survey, Chindwara.

Table 8: Household Response to Cooked Midday Meal Programme

Response	Percentage of Respondents	
	Daliya	Suruchi Bhojan
Extremely dissatisfied	3.52	0
Dissatisfied	32.16	18.91
Satisfied	61.67	79.64
Extremely satisfied	2.42	1.45

Source: Midday Meal Survey, Chindwara.

Table 9: Reasons for Dissatisfaction with the Cooked Midday Meal Programme

Reasons	Percentage of Respondents	
	Daliya	Suruchi Bhojan
Poor taste of meal	91.88	86.54
Small quantity of meal	56.88	65.38
Repetitiveness of meal	50.00	42.31
Intermingling of castes	6.25	0.00

Source: Midday Meal Survey, Chindwara.

monitoring of the programme's regularity and quality is a prerequisite for ensuring its success.

IV Challenges Ahead

From the discussion in the previous sections, it is clear that the new meal programme is of better quality and offers greater variety and is, therefore, more attractive to the households. However, the cost of suruchi bhojan is at least double of the daliya programme and raises the need to provide additional resources to the panchayats for implementing the scheme. Table 10 presents the data on the 'moolbhoot' funds available to the surveyed panchayats in 2003-04 fiscal year. The name of the panchayat and the total enrolment in the government and government aided primary schools within the panchayat is listed in columns 1 and 2. The reluctance of the panchayats to implement the daliya programme and the inability to run the suruchi bhojan over the entire school year is apparent from comparison of moolbhoot funds in column 3 with the expected proportion of moolbhoot expenditure on the daliya programme at the rate of Rs 0.60 per child per day in column 4 and the suruchi bhojan at the minimum rate of Rs 1.25 per child per school day in column 5. Under the daliya programme, panchayats would potentially exhaust 76 per cent of their development funds granted by the state commission, on an average. The average deficit due to the implementation of the suruchi bhojan would be approximately Rs 27,000 per panchayat. This programme's viability is, therefore, questionable if the state government is unable to raise additional resources for the scheme.¹¹

The reluctance of the Panchayats to implement the programme in its true spirit clearly stems from the lack of separate earmarked funds for the programme. The moolbhoot funds are primarily intended to meet the civic requirements of the panchayat, viz, electricity, water and sanitation facilities. The state governments directive to meet the cost of the midday meal programme through the moolbhoot funds would adversely affect the resources available to the panchayats and their financial independence, besides increasing the various competing expenditures for moolbhoot funds. This in turn could adversely affect the provision of basic public services in the villages. A natural consequence of this financial scarcity is that the panchayats cut back on expenditure on the meal programme by reducing the quantity, quality and the regularity of the programme.

The resulting scenario is not very encouraging for the future of the programme. Paucity of funds would result in greater irregularity in the provision of meals and poor quality of ingredients which could potentially have an adverse effect on children's health. In some of the schools visited by the survey team, where the suruchi bhojans were being provided, panchayats were cutting back on the costs of the programme by involving the students themselves in the preparation of the meals. In such a scenario, the midday meal programme might not only be ineffective in raising the attractiveness of schools to parents but may even adversely affect learning. Though the state government's initiative, is indeed more promising, in terms of the attractiveness of the programme, without a concurrent increase in the resources available to the panchayats the programme's longevity is deeply in question.

While there is a need to improve the financial resource for the programme through the allocation of separate, earmarked funds for the scheme, at the same time it is essential to increase the

transparency and the monitoring of the programme through the creation of grassroots institutions which have a stake in the efficient functioning of the scheme in the elementary schools. Members of the panchayat are usually economically better-off and are more likely to enrol their children in private schools rather than public schools. Vested interests within the panchayat may not give priority to the implementation of the scheme in its true spirit. Though the village education committees and the parent teacher associations are expected to be active participants in all school related issues within the panchayat, their participation in the decision-making process is almost absent. Even though all the government primary schools surveyed had a PTA according to the school headmaster, parents of 44 per cent of children enrolled in a public primary school did not know whether a PTA existed in their child's school and more than 50 per cent of the parents had not attended a single PTA meeting in the current academic year. The low level of participation may be because the parents do not perceive PTAs as an effective forum for redressing their concerns.

The village education committee and the parent teacher associations can be strengthened by restructuring their constitution and giving them the primary administrative and financial responsibility for implementing public school programmes. Parents of enrolled children and the school teachers should have a say in

Table 10: Financial Resources of Panchayats in 2003-04 Fiscal and Expected Expenditure on Midday Meals
(In Rs)

Panchayat	Primary School Enrolment	Moolbhoot (Rs per annum)	Proportion of Moolbhoot Expenditure for 200 School days (@0.60 per Child)	Proportion of Moolbhoot Expenditure for 200 School Days (@1.25 per Child)
Chimhua	177	27223	0.78	1.63
Marka Wada	330	53163	0.74	1.55
Mohli Bharat	540	56730	1.14	2.38
Dongriya Rayyat	250	47820	0.63	1.31
Barah Heera	319	50900	0.75	1.57
Jungavani	229	30701	0.90	1.86
Khami Heera	305	50326	0.73	1.52
Kopakhedda	365	40203	1.09	2.27
Kolhia	280	36389	0.92	1.92
Lingpani	200	45353	0.53	1.10
Bade Goan	390	59928	0.78	1.63
Bandhani	250	42154	0.71	1.48
Salibada Ghat	267	45367	0.71	1.47
Chhuadehi	338	45795	0.89	1.85
Khireti	281	76473	0.44	0.92
Hivrasawani	52	32099	0.19	0.40
Rapha	390	53904	0.87	1.81
Seja	310	36057	1.03	2.15
Rahibada	293	48643	0.72	1.51
Lakhanwada	354	53803	0.79	1.64
Hirri Mukasa	167	25248	0.79	1.65
Kondra	410	52616	0.94	1.95
Gadarwada	275	43677	0.76	1.57
Hirri	221	45928	0.58	1.20
Putarra	203	34211	0.71	1.48
Kudwari	500	64404	0.93	1.94
Banki	290	42402	0.82	1.71
Chhui	360	52967	0.82	1.70
Sajwa	340	56458	0.72	1.51
Kahua	131	42347	0.37	0.77
Dodakhuhi	203	35602	0.68	1.43
Nandori	300	39975	0.90	1.88
Lachua	390	58183	0.80	1.68
Chikli Mukasa	325	49720	0.78	1.63
Patniya	210	30445	0.83	1.72

Source: CEO, Janpad Panchayat, Chindwara.

the utilisation of central and state government resources allocated towards the school meal programme, including schemes such as the Sarv Shiksha Abhiyan. A democratic, accountable and transparent institution, involving parents, teachers and the panchayat may go some way in purging the administration of schools of vested interests.

V

Midday Meal Programme in Karnataka

The lacklustre implementation of the school meal programme in Madhya Pradesh can be contrasted with the successful implementation of the scheme in Karnataka. 'Akshara-Dasoha' or the midday meal programme was first implemented in July 2002 in 7 backward districts of northern Karnataka. In the second stage the programme has been extended to all the remaining 20 districts of the state. Since Karnataka is primarily a rice eating area, children are provided 100 grams of rice with 20 gms of pulses and 25 grams of vegetables with some variation in the cooked meals per week. The most common meal is rice and sambhar across the schools. This meal constitutes approximately 400 kcal of consumption.

The expenditure on the programme is greater than both the daliya and suruchi bhojan scheme in Madhya Pradesh, as shown in Table 11. In addition, children are being provided with iron folic tablets every other school day as well as deworming tablets twice a year.

The government has also tried to introduce variation in the programme by suggesting a menu for the entire school week as shown in Table 12. Thus, in comparison with the meal programme in Madhya Pradesh, the expenditure per student is higher and the programme has been designed to be more attractive to the students. There has also been good community participation in the programme. Since lower primary classes (1 to 5) and upper primary classes (6 and 7) are usually held in the same school building simultaneously, the programme has been extended to the 7th grade, through the generation of additional community resources. This activism on the part of the school administration is better understood in the context of the financial and administrative organisation of the programme.

Institutional and Financial Organisation

The Karnataka government was providing earmarked funds for the conversion of raw grains into hot cooked meals at the rate of Re 1 per child per day in 2003-04 school year. The fund was allocated from the income accruing to the government through the state lottery. Funds from the central government schemes such as the SGRY were being used for the construction of kitchen sheds and payment of salaries to the cooks. The financial structure of the scheme, therefore, was such that it did not burden the existing resources of the panchayats or give them an incentive to compromise on the quality of the meals.

More importantly, Karnataka initiated a new system of administration of its education system through the creation of school development and monitoring committees (SDMC) in primary and higher secondary schools in 2001. One of the aims of this policy was to ensure that parents of children enrolled in the government schools have an effective voice in the process of education of their children while at the same time decentralise the control and the functioning of the schools at the grassroots level.

The SDMCs have been structured such that there is representation from all quarters. Nine of its members are parents of children currently enrolled in the school with a minimum of three females, two from SC/ST and one from minority community. The membership expires if the parent's child drops out of that school. The membership of parents is decided in a regular meeting of each school's parent association. The head master of the institution is the secretary while one of the nine parents is the chairperson of the SDMC. Each SDMC has a fixed term of three years. The remaining members consist of village, block and district panchayat members and a few nominated members. However, two-thirds majority of parent representatives is essential for conducting any meeting of the SDMC.

The funds for the meal scheme are released directly to the schools' SDMC by the tahsildar via the panchayat secretaries. Thus, the finances are in the hands of the school organisation itself. Besides, they also have the power to sanction leave of school teachers, monitor their attendance and directly handle construction of school building and other additions to the school's infrastructure.

Observations on Implementation of School Meal Programme

The author observed the implementation of the scheme in Dakshin Kannada district's rural as well as urban government primary schools. It was a pleasure observing the implementation of the programme in the schools here.

The cooked meals were being provided regularly in the schools. This information was obtained from interaction with both students and the school's SDMC. Temporary kitchen sheds were being utilised for preparing meals. However, most children were getting their own plates from home for the meals. Drinking water was brought from the nearest source either in containers or the children would go to the nearest source. In terms of the infrastructure facilities, therefore, more can be done. However, the intensity of the scheme and the smoothness of programme implementation was similar to the impressions gained in the tribal

Table 11: Cost Structure of Midday Meal Programme
(Rs per 100 students per day)

Category	Karnataka
1 Pulses	50
2 Oil	10
3 Sugar	0
4 Milk	0
5 Vegetables (specify)	20
6 Salt and spices	0
7 Other (specify)	0
Total cost of Ingredients	80
8 Fuel	20
9 Cook's salary	70
Total variable cost	170

Source: Director of Public Instruction, Government of Karnataka.

Table 12: Suggested Weekly Menu of Midday Meal Programme

Weekday	Menu
Monday	Sweet Pongal/Khara Pongal
Tuesday	Rice and sabzi
Wednesday	Rice and sambhar
Thursday	Lemon rice
Friday	Bisi bele bhath
Saturday	Upma

Source: Director of Public Instruction, Government of Karnataka.

blocks of Chindwara district where the Madhya Pradesh government has allocated higher amount per child as well as provided earmarked funds for the scheme since 1995.

VI Conclusion

The analysis of the midday meal programme in Madhya Pradesh leads to the strong conclusion that in every state there should be a separate fund for effectively implementing the scheme. The comparison of the scheme's functioning in the tribal and non-tribal areas of Madhya Pradesh as well as between Karnataka and the non-tribal blocks of Madhya Pradesh supports this conclusion. In this context, the emphasis of the UPA government on enhancing the quality of elementary schooling in the country is a welcome step. The midday meal programme is an essential ingredient for attaining this goal. The resources raised through the imposition of the education cess must be channelised towards enhancing the quality and the outreach of the midday meal programme in the country. The proposal of the central government to provide state governments with a budget of Re 1 per child per day for the scheme is a step in the right direction. However, the programme allocation could be indexed to local prices prevailing in each area so that a minimum quality of the meal is ensured besides being able to account for any future increase in the price of the meal ingredients. At the same time, there is a need to create the right kind of institutions which have a stake in ensuring that the programme functions uninterruptedly and that these funds reach the intended beneficiaries through the nutritious supplementary meal.

As the scheme becomes more successful in raising enrolment and attendance rates, the pressure on the existing school system would be even greater. Along with higher expenditure on the school meal programme, additional resources will have to be provided for a concurrent increase in teacher-student ratio, the size of classrooms, and other infrastructure facilities to meet the increased demand for schooling. [27]

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Notes

[This article has benefited from the insights of Jean Dreze, Santosh Jain Passi, Sumit Bose, Rohini Somanathan and Sudhir Nath, amongst others.]

- 1 According to the 2001 Census, 35 per cent of the population in India is in the 0-14 age group.
- 2 The PROBE (Public Report on Basic Education for India) report, estimated that the average annual cost of sending a child to a rural primary school in 1996 was Rs 318. Fifty-nine per cent of schools in rural north India don't have drinking water, 67 per cent don't have teaching kits and 89 per cent don't have a toilet.
- 3 National Family Health Survey, 1998-99.
- 4 In a review of research studies, Behrman (1993) points out the existence of a positive relationship between children's health and their educational outcomes.
- 5 NFHS (1998-99): Per cent of children who are below -2 standard deviations from the International Reference Population Median for weight-for-age, recommended by the WHO.
- 6 The allocation for the tribal blocks was reduced in 2003-04 to Rs 0.60 per child per school day.
- 7 In each household all children in the target age-group were administered a food consumption and activity recall survey for the previous day. The consumption survey was designed by professional nutritionists at the University of Delhi. The field workers were also trained by a nutritionist for conducting the survey. Using standardised household utensils, children

were asked what and how much food they consumed from the moment they woke up the previous morning to the time they went to bed the previous night. Interviews were conducted in the presence of the child's mother either during the school lunch break or after school on weekdays at the child's home. Nutritive value of Indian foods published by the Indian Council of Medical Research has been used to calculate the total calorie intake for each child.

- 8 Government of Madhya Pradesh, Department of Panchayat and Rural Development circulars to the district administration.
- 9 The survey asked: "Are you satisfied with the quality of the school meals compared to your home cooked meals?" The response was coded as (1) extremely dissatisfied (2) dissatisfied (3) satisfied (4) extremely satisfied.
- 10 Parents were asked "In your opinion what should be provided under the Midday meal programme in the school?" (1) cooked meals (2) ready to eat food (3) dry ration (4) none of the above.
- 11 Though the state has directed the panchayats to spend at least one-third of their moolbhoot funds towards meeting the cost of the suruchi bhojan programme, it has not explicitly provided other sources for meeting the remaining two-thirds of the cost. Some of the panchayats were using SGRY funds to meet the labour costs of the scheme.

References

- Behrman, Jere R (1993): 'The Economic Rationale for Investing in Nutrition in Developing Countries', *World Development*, 21(11), pp 1749-71.
- Dreze, Jean and Geeta Gandhi Kingdon (2000): 'School Participation in Rural India', *Review of Development Economics*, 5(1), pp 1-33.
- Dreze, Jean and Aparajita Goyal (2003): 'Future of Midday Meals', *Economic and Political Weekly*, November, 4673-83.
- Gopalan, G, B V Rama Shastri and S C Balasubramanian (2003): *Nutritive Value of Indian Foods*, Indian Council of Medical Research, New Delhi.
- Government of India (1995): 'Nutrition Support to Education', *Report of the Committee on Midday Meals*.
- (2000): 'A Comparative Study of Nutritional Support to Primary Education in Orissa and Tamil Nadu', *Planning Commission*, New Delhi.