



World Food
Programme

Home-Grown School
Feeding Project



INDIA

A desk review of the Mid-Day Meals Programme
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1. INTRODUCTION

India is now largely recognized as a fast-developing economy. However, problems of poverty and inequality still remain a daily reality. The projected official poverty figures of the Government of India for 2007 place 19.3 percent of its population below the poverty line¹ (Planning Commission, 2002). Asian Development Bank, however, estimates that 30.7 percent of the population has income of less than US\$1/day (ADB 2007). The mid-day meal programme is a multi-faceted programme of the Government of India that, among other things, seeks to address issues of food security, lack of nutrition and access to education on a nationwide scale.

The first part of the report gives a general overview of country-specific facts and highlights three themes: diversity, development and governance. The second part focuses on the national public food distribution system and the primary institution associated with it. The third part provides a general account of the historical development of the mid-day meal programme at the national level, focusing on the National Programme of Nutritional Support to Primary Education (NP-NSPE). The fourth section discusses evaluation studies including cross-state comparisons and single-state enquiries. The fifth section provides details of the recent revision to the NP-NSPE and the final section offers some conclusions.

¹ Defined on the basis of nutritional standards: 2,400 calories per person per day in rural areas and 2,100 calories in urban areas (Kerala State Planning Board 2006)

Other than these official languages, there are 844 different dialects practiced in various parts of the country (Government of India, 2007). The cultural and religious variations result in different dietary practices within the country.

2.2. Development

India is recognized as one of the fastest growing economies of the world. According to the advanced estimate figures released by the Central Statistical Organization in February 2007, the growth of Gross Domestic Product (GDP) at factor costs at constant prices for 2006-07 was 9.2 percent (in 2005-2006, it was 9.0 percent). The overall macroeconomic indicators are robust and the country is in a strong balance of payment position. Most of this growth has come from the service sector (55.1 percent), followed by the industrial sector (26.4 percent) and the agricultural sector (18.5 percent).

At the macroeconomic level, a home-grown mid-day meal programme in India must be understood in relation to the problems of inflation and inclusiveness:

Inflation: In 2007, the inflation rate started at 3.98 percent and continued to increase to 6.7 percent, resulting in an overall average rate of approximately 5 percent for the 52 weeks preceding February 3, 2007. This resulted in the rise of prices of primary commodities,³ mainly food. Wheat, pulses, edible oils, fruits, vegetables, condiments and spices are reported to be the major contributors to the higher inflation rate of primary commodities. As much as 39.4 percent of the overall inflation in whole sale price index (WPI)⁴ on February 3, 2007 came from the primary group of commodities. Within the primary group, the mineral subgroup had the highest inflation at 18.2 percent. This was followed by food articles at 12.2 percent and non-food articles at 12.0 percent. Food articles, however, have a higher weight (15.4 percent) in the WPI basket. Including processed and manufactured products such as sugar and edible oils, food articles contributed as much as 27.2 percent to the overall inflation (Ministry of Finance, 2006, Section 1.9).

Inclusiveness: India's agricultural sector experiences low growth. The budget report identifies factors that contribute to the low growth, including low investment, imbalance in fertilizer use, low seeds replacement rate, a distorted incentive system and low post-harvest value addition. The report observes that "given its low share, a mechanical calculation of the adverse impact of low growth in agriculture on overall GDP can be misleading. With more than half the population directly depending on this sector, low agricultural growth has serious implications for the inclusiveness of growth" (Ministry of Finance, 2006, Section 1.8). Supply-side shortages in essential commodities used for daily consumption contribute to the problems of price instability and inflation. The report is optimistic, however, about what it calls "recent

³ Primary commodities consist of food, minerals and non-food articles.

⁴ Whole sale Price Index: Index used to measure the change in the average price level of goods traded in wholesale market. A total of 435 commodities data on price level is tracked.

spurts” of activity in food processing and also “the integration of the supply chain from the farm gate to the consumer’s plate” (Section 1.8).

2.3. Governance framework

The national republic of India is comprised of 28 states, six union territories⁵ and one national capital territory – Delhi (see Map 2). It has a loosely federated structure with the President at the head of the nation and a Prime Minister who, along with the Council of Ministers, conducts day-to-day administration. The Parliament (legislature) has two houses – the Lok Sabha and the Rajya Sabha. The 545 Lok Sabha members are directly elected and the 250 Rajya Sabha members are elected by the state legislatures in proportion to their population (Malayala Manorama 2003).



Governors are the heads of the states and they are nominated by the President. Administration at the state level is carried out by the Council of Ministers, headed by the Chief Minister. The Assembly is the legislative body and it can have one or two houses. The division of powers between the centre and the states is defined in the Seventh Schedule of the Indian Constitution and jurisdiction over subjects is divided as follows:

- The Union List includes 97 subjects (e.g. defence, foreign affairs, foreign trade, currency, income tax, excise duty, railways, shipping, posts and telegraphs, interstate trade and commerce) and only the Union Government at the centre has control over these subjects.
- The State List has 66 subjects (e.g. local government, police, public health, communications, agriculture, lotteries, sales tax and taxes on entertainment and wealth) and the states have exclusive legislative powers over them.
- The Concurrent List includes 47 subjects (e.g. electricity, education, economic and social planning, criminal law, social security, trade and commerce, marriage and divorce, stamp duties, trade unions and price controls) over which the states and the centre may legislate. If there is a dispute, the centre is pre-eminent (Constitution of India, 2007).

⁵ Those territories that come directly under the rule of the Centre due to historical reasons.

With the 73rd and 74th Constitutional Amendments, many states have further devolved their powers to local governments across three tiers - the District, the Block and the Local Panchayats or Urban Local Government Institutions. The pattern of devolution varies among states since local government is a state matter.

In the above short review we have seen that:

- India has a varied geography that includes physical, cultural and religious diversity. This has impact on agricultural policies, food habits and dietary requirements;
- India faces growing inflation, even with robust macroeconomic indicators, with the greatest price increases occurring in the food sector. Most of the economic growth has taken place in the non-agricultural sectors, which marginalizes those who are dependent on the agricultural sector (i.e. more than 50 percent of the population);
- India's governance structure follows a federal system. States have exclusive jurisdiction over health, agriculture, local government, trade and commerce within the state. The centre and state may both legislate over social security, economic and social planning, interstate trade and commerce and education, which are all on the Concurrent List. Foreign trade is on the Union List. Many states have devolved responsibilities further down across three tiers of local government.

Before discussing the mid-day meal programme itself, it is essential to understand broad national-level mechanisms of intervention in food.

3. INDIA: FOOD



Figure 2: FCI storage warehouses. Source: http://fcamin.nic.in/dfpd_html/index.asp

Government intervention in India in the food sector has been mainly targeted at promoting food security. The Department of Food and Public Distribution under the Ministry of Consumer Affairs, Food and Public Distribution is in charge of managing the food economy of the country. A public distribution system (PDS) managed by the Food Corporation of India (FCI) operates alongside a free market. The objectives of the FCI are:

- effective price support for safeguarding the interests of farmers;
- distribution of food grains throughout the country by the PDS;
- maintenance of buffer stocks of food grains and a satisfactory level of operation to ensure national food security (Food Corporation of India, 2007).

FCI procures food (e.g. wheat or rice) through purchase centres at pre-announced 'procurement prices' fixed by the central government.⁶ This food is then sold to state civil supplies corporations or food corporations at an issue price that is also fixed by the government. The state then distributes the food to the public through fair price shops or ration shops at 'ration' or 'issue' prices. The cost incurred by FCI in this operation is reimbursed by the central government through a 'food subsidy' (Jha and Sreenivasan, 2005).

The literature on the PDS is vast with studies focusing on the system (Raghavan, 2003, Shankar, 2002, Ramaswami, 2002) and also linking the system to issues such as international trade (Raghavan, 2006), agriculture (Mujumdar, 2006, Chand, 2007) and gender (Krishnaraj, 2006). For purposes of this report, it suffices to take note of the following:

- Government intervention in the food grain market began in the mid-1960s when India was facing a huge food shortage and was relying on the United States for its wheat supply.
- As a result of the Green Revolution, India attained self-sufficiency in food grains by the 1970s and is now a grain surplus country and a leading exporter of food grains.
- Approximately 225 million Indians remain chronically undernourished, which suggests that the food grain surplus is a demand surplus, not an actual surplus. This means that a large section of the population cannot access food even at issue prices.
- Issue prices have been driven upward by high procurement prices introduced to support farming, on which 60 percent of the population still depends.
- The provision of food subsidies has been universal and non-targeted.

⁶ The FCI website claims that farmers are free to sell the produce at a higher price in the market if they can do so. However, restrictions on selling often occur, such as when farmers were forced to sell to FCI at procurement prices by not being allowed to bid in the open market until FCI achieved its procurement target (Jha and Sreenivasan 2001).

- In 1997, a new targeted PDS (TPDS) was introduced for families below the poverty line (BPL families).
- Under this scheme, states have to identify BPL families and provide 10 kg of food grains per family each month (20 kg beginning in April 2000) at 50 percent of the FCI cost. The central government guarantees the supply of grain for this scheme.
- States may provide additional quotas and price subsidies from their own resources.
- Above Poverty Line (APL) families will continue to receive untargeted subsidies at 90 percent of FCI's economic cost, until they are eventually phased out.

Within the context of this national-level intervention, we shall now see how the mid-day meal programme in India evolved, what its challenges are, how it is implemented and what the effects of this have been.

4. HISTORICAL DEVELOPMENT OF THE MID-DAY MEAL PROGRAMME

Feeding in India is commonly known as the mid-day meal (MDM) programme. Its genesis is a long history of initiatives peppered across the subcontinent.

4.1. Early history

The report of the Committee on Mid-Day Meals (1995) states that the first venture in mid-day meals was in 1925. At that time, an MDM programme was introduced for children of poor socioeconomic status in the Madras Corporation area in the state of Tamil Nadu. Subsequently, in 1928, Keshav Academy of Calcutta introduced a compulsory 'Mid-day Tiffin' for school boys at the rate of four annas⁷ per child per month. In 1941, Kerala started the School Lunch Programme. Bombay started implementing a free mid-day meal scheme in 1942. Bangalore city in 1946 provided cooked rice and yoghurt. The Uttar Pradesh Government introduced a voluntary scheme in 1953. By the 1950s, many states had introduced MDM programmes with the assistance of different international agencies like the United Nations Childrens Fund (UNICEF), the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). International voluntary and charity organizations (e.g. Catholic Relief Service (CRS), Church World Service (CWS), CARE and USA's Meals for Million) also came forward to assist. During 1958-59, an Expanded Nutrition Programme (ENP) was introduced, funded jointly by FAO, WHO, UNICEF and the Government of India. This was subsequently expanded into the Applied Nutrition Programme (Committee on Mid-day Meals, 1995).

4.2. Latter history

The idea of a national mid-day meal programme had been recurring since 1982, when the idea of 'Food for Learning' with FAO commodity assistance was mooted. Scheduled Caste (SC) and Scheduled Tribe (ST) girls were to be covered under this programme. In 1983, the Department of Education in the central government (after interministerial consultations) prepared a scheme according to WFP guidelines. The scheme was to cover 13.6 million SC girls and 10.09 million ST girls in classes I-V in 15 states and three union territories, where the enrolment of SC and ST girls was less than 79 percent. The total annual cost of commodity assistance was US\$163.27 million. Other costs, such as transportation, handling and cooking, were to be borne by the state governments. The proposal was circulated among states and union territories with mixed results. While some states were willing to accept the scheme, others were sceptical. For instance, Rajasthan was concerned that if WFP assistance were withdrawn, the state would not be able to continue the programme on its own and Uttar Pradesh felt that it would not be practicable to have mid-day meals only for SC and ST children.

⁷ An anna was a currency unit formerly used in India, with a value equal to 1/16 of a rupee.

Another programme requiring central government assistance for mid-day meals for children in primary schools throughout the country was considered from 1984 to 1985. The programme was conceived as an antipoverty programme as well as an educational one. Even though the Planning Commission of India⁸ prepared a set of guidelines for implementing the scheme during the seventh Five-Year Plan⁹, it was not approved, apparently due to resource constraints. In December 1988, the Department of Education formulated a proposal for covering 994 Integrated Child Development Services (ICDS) blocks¹⁰ with a concentration of SC and ST children. By 1990-91, 17 state governments were implementing a mid-day meal programme for primary school children from 6 to 11 years with varying degrees of coverage. In 1995, the Report of the Committee on Mid-Day Meals stated that the objectives of the programme in India were to: “(i) enhance the nutrition status of school-age children and (ii) hasten the march to universalization of elementary education” (Committee on Mid-day Meals, 1995).

4.3. Most recent developments

While the national mid-day meal programme was being debated, a rather ironic situation was developing. Food procurement witnessed a quantum jump in two decades from 4 million tonnes to over 25 million tonnes per annum. This resulted in a sharp increase in buffer stocks in FCI warehouses with food stocks piling up to more than three times of what was required for food security. However, at the same time starvation and deaths from starvation in India were increasing. This state of affairs finally came to be challenged in May 2001 by a public interest litigation filed by the People’s Union for Civil Liberties in the Indian Supreme Court.¹¹ The PIL argued that federal institutions and local state governments should be responsible for mass malnutrition among the people. On 28 November 2001, the Supreme Court passed an interim order that provided for the conversion of eight food security schemes into entitlements (i.e. rights) of the poor. These included the Antyodaya Anna Yojna, the National Old-Age Pension Scheme, the Integrated Child Development Services (ICDS) Programme, the National Mid-day Meals Programme (NMMP), the Annapurna scheme and several employment schemes providing food for work. Of the eight schemes, the most significant was the order directing all state governments to provide cooked mid-day meals in all government schools for classes I-V in six months (De *et al.*, 2005). On 8 May 2002, the Supreme Court also appointed two Commissioners to monitor the implementation of the interim orders. The Commissioners have appointed advisors in each state. The 2002 deadline was later

⁸ The Planning Commission is concerned with building a long-term strategic vision for the nation and decides on priorities. It works out sectoral targets and provides a promotional stimulus to the economy to grow in the desired direction. It also has an integrative role providing a holistic approach to policy formulation in critical areas of human and economic development (<http://planningcommission.nic.in/aboutus/history/func.htm>).

⁹ Five-Year Plan refers to the national economic development plan which covers five years (en.wikipedia.org/wiki/Five-year_plans_of_India).

¹⁰ Blocks where the Integrated Child Development Services Scheme was operational. The Integrated Child Development Services (ICDS) was launched in 1975 seeking to provide an integrated package of services in a convergent manner for the holistic development of the child.

¹¹ PUCL vs. Union of India and Others, Writ Petition (Civil) 196 of 2001.

extended to January 2005, following difficulties in implementation (Khera, 2006) and also the range was extended by the Government of India to cover classes I-VII in 2003 (Ravi, 2006).

5. NATIONAL PROGRAMME OF NUTRITIONAL SUPPORT TO PRIMARY EDUCATION (NP-NSPE)

5.1. Early phase

The Supreme Court order was to be implemented starting in June 2002, but some states violated the order citing paucity of funds as a reason (Parikh and Yasmeen, 2004). At that time, a centrally-sponsored scheme was operating which had been launched on 15 August 1995 and initially covered 2,408 blocks in the country. By 1997-98, this scheme had been introduced in all blocks of the country and was further extended in 2002 to cover children in more schools in classes I-V. In this scheme, the cost of cooking was to be borne by the state governments and UT administrations. However, many state governments and UT administrations were unable to provide adequate funding for the cooking costs; they resorted to distributing raw food grains instead of providing cooked mid-day meals. To ameliorate some of the difficulties, the Planning Commission in December 2003 requested the state governments to allocate a minimum of 15 percent of additional central assistance under the Pradhan Mantri Gramodaya Yojana (PMGY) toward cooking costs for the mid-day meal scheme. Even so, the programme continued to suffer because of budgetary constraints.

In May 2004, a new coalition government assumed power in the centre. This government promised universal provision of cooked meals fully funded by the centre. The promise was followed by enhanced financial support to the states for cooking and building sufficient infrastructure. The NP-NSPE was consequently modified in September 2004 to provide cooked mid-day meals with 300 calories and 8-12 grams of protein to all children studying in classes I-V in government and aided schools and centres under the Education Guarantee Scheme and the Alternative and Innovative Education Scheme. Given this additional support, the political appeal of the programme and active grassroots campaigns in the states, the scheme has expanded to cover most children in primary schools in India. In 2005, it was estimated that the programme would cover 130 million children in 950,000 schools, making this the largest mid-day meals programme in the world.

5.2. Revision to NP-NSPE in 2004

The 2004 revised NP-NSPE scheme provided central assistance to the states for:

- cooking costs at INR¹² 1 (US\$0.02) per child per school day;
- transport subsidies, which were raised from the earlier maximum of INR 50 (US\$1.24) per quintal to INR 100 (US\$2.49) per quintal for special category states and INR 75 (US\$1.87) per quintal for other states;
- management, monitoring and evaluation costs at 2 percent of the cost of food grains, transport subsidies and cooking assistance;

¹² Indian Rupee.

- provision of mid-day meals during summer vacation in drought-affected areas.

Infrastructural requirements were met through convergence with other development programmes, including the Sampurna Grameena Rozgar Yojana (SGRY), Basic Services for Urban Poor (BSUO) and Urban Wage Employment Programme (UWEP) for the construction of kitchen and stores. Water supply requirements were met through convergence with the Accelerated Rural Water Supply Programme (ARWSP), Swajaladhara and Sarva Shiksha Abhiyan.



Figure 3: Source:
<http://indiatgether.com/2006/dec/edumidday.htm>

The revised 2004 scheme also provided for a four-tier institutional mechanism for programme management, through the constitution of Steering and Monitoring Committees at the national, state, district and block levels. The implementation of this revised scheme had mixed results. Benefits of having a mid-day meal programme were clear, yet there were serious shortcomings in the implementation of the programme. The literature review below provides an overview of evaluations of the mid-day meal programme.

6. EMPIRICAL STUDIES OF THE MID-DAY MEAL PROGRAMME ACROSS STATES

6.1. Cross-state studies

Radhakrishna and Ravi (2004) report on malnutrition in India from studies of the National Nutrition Monitoring Bureau. They suggest that “about half of the children of India might not have reached their physical or mental potential and about one fifth of the children might be functionally impaired”. They identify eight states – Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal – as accounting for 77 percent of malnourishment in children. They cite pioneering studies by Sukhatme (1982) and Seckler (1982) that explain that the efficient conversion of food into energy is dependent on access to safe drinking water, health care and environmental hygiene because these reduce food wastage from diarrhoea and dysentery. States like Kerala and Tamil Nadu have low levels of malnutrition even when their food energy intake is low, while states like Rajasthan and Uttar Pradesh have higher malnutrition even with higher levels of food intake.



Figure 4: Source: Sreenivas (2003) *Indian Express*.

States like Kerala and Tamil Nadu have low levels of malnutrition even when their food energy intake is low, while states like Rajasthan and Uttar Pradesh have higher malnutrition even with higher levels of food intake.

Brinda Viswanathan (2006) reviews data from the National Sample Survey¹³ for the year 1999-2000 to discern access to nutritious meals across states in both urban and rural areas. She reports that only a few states had a scheme in place and that Tamil Nadu had better access rates that included girls (rural areas were better targeted than urban areas). Her study shows evidence of overall improved literacy rates and educational attainment in states that had a scheme.

6.2. Limited cross-state studies

Chattisgarh, Karnataka and Rajasthan: Dreze and Goyal (2003) conducted a survey between January and April 2003 in three sample states: Chattisgarh, Karnataka and Rajasthan. The survey included 81 randomly selected villages (i.e. 27 villages in each state) and involved interviews with teachers, parents, cooks and others. Even though they found the presence of a mid-day meal scheme in all three states, they argued that well-devised school meals could contribute to the advancement of elementary education, child nutrition and social equity and a badly devised scheme might do more harm than good. The negative findings included:

- very poor infrastructure facilities (e.g. cooking shed, water supply and utensils);

¹³ This is a quinquennial survey on consumption patterns that collects, among other things, information on meals at a household level.

- repetition of the same menu every day (i.e. in Rajasthan, *ghoogri*,¹⁴ in Chattisgarh, rice with dal or vegetables and in Karnataka, a better menu of rice and *sambar*¹⁵ with vegetables, *pongal*,¹⁶ lemon rice and even sweets like *kshira*¹⁷);
- overt and covert forms of caste prejudices and discrimination toward lower caste children and cooks in some areas;
- serious health hazards including children falling sick after meals;
- disruption of classroom processes because teachers had to oversee the operation (e.g. in one place there were soot-covered classrooms using make-shift stoves and inadequate utensils with help from young children to cut vegetables which resulted in no teaching after lunch);
- very low allocation of funds per meal (50 paise¹⁸, US\$0.01).



Figure 5: Source:

<http://www.hinduonnet.com/thehindu/thscrip/print.pl?file=20030815002208500.htm&date=fl2016/&prd=fline&>

Positive effects included:

- improved school enrolment (from 15-29 percent), especially in girls;
- improved school attendance and retention through the day;
- socialization to overcome caste and gender prejudices in some cases;
- non-income support to poor families;
- good management of food logistics in terms of delivery and supply;
- comparatively good financial allocation (i.e. 1 rupee) and management in some states such as Karnataka and Tamil Nadu.

Madhya Pradesh and Karnataka: Afridi (2005) reports on a survey conducted in January-February 2004 in 41 randomly sampled villages in the non-tribal block of the Chindwara District of Madhya Pradesh. Within each village, 15 households with a child from ages 5-12 were surveyed through systematic random sampling. The enrolled child was then linked to the school he or she attended. Information on the scheme was collected from 615 households, 74 primary schools (public and private) and 35 village panchayats.

In Madhya Pradesh, the mid-day meal programme is devolved to local panchayats. The state government has framed different schemes for panchayats in tribal and non-tribal areas. There are separate earmarked funds for the mid-day meal in tribal areas; in non-tribal areas, funds that are devolved from the centre to the local

¹⁴ A gruel of boiled wheat mixed with jaggery, with oil and peanuts added in some cases.

¹⁵ Curry made of dal and vegetables with spices.

¹⁶ Food made of seasoned rice and dal.

¹⁷ Made of rice and milk, like rice pudding.

¹⁸ A paisa (pl. *paise*) is a monetary unit currently equivalent to $\frac{1}{100}$ of a rupee.

panchayats can be used for the scheme subject to a maximum of INR 0.60 (US\$0.01) per child each day. In November 2003, the state government introduced a new mid-day meal scheme on a pilot basis mandating panchayats to spend INR 1.25 to INR 1.30 (approximately US\$0.03) per student each day; the area studied fell under this pilot scheme. The panchayats were also required to engage two cooks to provide *roti*¹⁹ and *sabji*²⁰ in place of *daliya*²¹. The general feeling was that the cost estimates of the revised menu fell short of the prevailing market prices, which made providing quality meals difficult.

The study reports delays in the implementation of the programme, citing reasons of grain stocks running out, cooks on holiday and delays in receiving permits for obtaining grain allocations from PDS shops. Thus, five schools in the study sample continued to distribute dry rations. The study found that 47 percent of the panchayats had spent less than the mandated amount in the old scheme. While the old scheme served daliya alone, the new scheme was to serve roti (100 gms) with 60 gms of vegetables or 20 gms of dal per school each day, with a menu switch every ten days. The empirical evidence confirmed that children were getting a more nutritious diet than before.

Infrastructure facilities were problematic, however, with no school having a separate kitchen. In most schools, an abandoned room in the school building was used. Since firewood was the main fuel, this resulted in smoke and distraction to classes. There were not enough plates. Students either brought plates from home or used a paper torn from school notebooks. Cooking utensils were provided by all panchayats and water was available either through water stored in steel buckets or hand pumps. While 60 percent of parents were satisfied by the old programme, 80 percent were satisfied by the new one. The main problem was in relation to funds. Faridi reports that while the old scheme used approximately 76 percent of the panchayats' development funds, the new scheme would leave a shortfall of around INR 27,000 (US\$672) per panchayat, which would potentially jeopardize the programme's viability in the long run. In places where the new scheme was run, panchayats were cutting costs by involving students in the implementation of the scheme which adversely affected learning. There was also very little evidence of involvement by village education committees or parent-teacher associations.

Faridi reported better implementation in Karnataka. Children were provided with 100 gms of rice, 20 gms of pulses and 25 gms of vegetables with variations in cooked meals every week. Rice and sambhar was the most common menu. Children were also provided with iron, folic acid and deworming tablets. Community participation was high and the programme was extended with additional community resources from class V to class VII. Funds in Karnataka are earmarked and allocated by the state government at the rate of INR 1 (US\$0.02) per child each day from lottery funds. Central government assistance was used for infrastructure and for cooks' wages so as not to burden the panchayat. Karnataka had also revamped the administration of

¹⁹ A form of thin unleavened flat bread, similar to tortillas.

²⁰ Dry vegetable curry.

²¹ A form of soup made with daliya dal similar to chick peas.

its educational system to give power to School Development and Monitoring Committees (SDMCs) with strong parental presence. The SDMCs were powerful bodies and they received funds for the meals scheme directly from the *Tahsildar*²² through panchayat secretaries. Faridi reports that the scheme was working smoothly with temporary kitchen sheds for cooking and availability of water, even though there was room for improvement in other infrastructure facilities. She concluded that this was similar to what was observed in Madhya Pradesh where more funds were allocated.

6.3. Case studies of individual states

West Bengal: In 2004, the Pratichi research team conducted a study in the Birbhum District comparing 15 schools chosen randomly from a block that ran the mid-day programme with 15 schools chosen randomly from a block that did not run the programme. Parents and children from ten households in each of the 15 schools were interviewed along with teachers, parent-teacher associations, panchayat members, Anganwadi Sahayaks, others involved in cooking and political and social activists. The findings were also corroborated through a workshop where respondent parents and teachers were assembled.

The team found that attendance was up by more than 10 percent in schools where the mid-day meal programme was run, while it was constant for the others. This impact was much higher among the SC (12.6 percent), ST (19.9 percent) and Muslim (13.2 percent) populations and the greatest impact was for ST girls (25.4 percent). Perceptions of impact varied. While the majority of the Hindu households felt that there was no positive impact, the wage earners and small cultivators (i.e. with SC, ST and Muslim background) saw important impacts of the programme, including the ability to provide a second meal during the day. It was also felt that social taboos and inhibitions were reduced by sharing a meal. Teacher attendance was also reported as being more regular due to increased responsibility. While 80 percent of the parents were in favour of the programme, 20 percent who were caste Hindus were opposed to it, mainly because they did not really benefit from it because their children had a meal anyway and also because the increased attendance brought in more SC, ST and Muslim students. Eighty-two percent of the parents were willing to contribute and help in the programme either in cash, kind or labour. The meal served consisted of *khichuri*²³ and 80 percent found the food attractive, though there were also suggestions for improvements. Before coming to school, 74.4 percent of the children did not have any food, with a few having just tea. Most children (88 percent) wanted the programme to continue. In the areas without a mid-day meal programme, most parents wanted the scheme to be introduced and were inclined to participate in making that happen.

The study also reported on the following problems:

²² A revenue officer in charge of a subdivision in a district.

²³ Rice cooked with pulses and sometimes vegetables.

- poor quality and variety of food;
- poor hygiene (including reports of sickness after meals);
- inadequate infrastructure (e.g. food was prepared in the open with the possibility of accidents and without adequate utensils);
- inadequate payment of salaries to cooks;
- insufficient budgetary allocation toward conversion costs which reportedly resulted in the fixed menu;
- caste and religious bias among some parents in some places;
- limited opportunities for parental participation in the programme;
- disturbance in teaching activity due to time demands on teachers, even though their participation was whole-hearted and parents were sometimes involved as well.

Rajasthan: Blue (2005) conducted a study in eight schools (recommended by Block Education Coordinators) in rural Rajasthan among subsistence farming tribal communities. She conducted personal observation and semi-structured interviews using a local translator with teachers, cooks, primary school children, parents and Seva Mandir para workers. She reported that in Rajasthan it was difficult to draw conclusions on the programme's effect on school enrolment because the mid-day meal programme was launched concurrently with the Shiksha Aapke Dwar programme which required teachers to identify non-enrolled students in villages and persuade them to attend school. In support of this argument, she points out that the summer meal programme conducted during holidays attracted far fewer children than had been expected, causing food to be thrown away. Blue reports a widely held belief that retention had improved due to the introduction of the mid-day meal scheme, but she questions the net impact of the scheme. The problems she identified include:

- children and teachers spending long hours fetching firewood and stirring pots of ghogri and sometimes, in the case of older children, even helping with actual cooking;
- large amounts of time spent by teachers supervising meal preparation and maintaining records;
- the inadequacy of funds to provide quality meals;
- cooks' dissatisfaction with the meagre salaries paid to them;
- children's boredom with monotonous menus;
- lack of enough plates in some cases, resulting in children eating off leaves or paper;
- irregular and delayed delivery of wheat and funding in some cases.

Since schools were paid every 3-6 months, teachers took loans of food ingredients from the local shops and paid them back when funding came through. There was wide variation among the schools in the amount of funding per student, cooks' salaries and the use of additional food ingredients. The cooks determined how much food was to be cooked. Food was always shared, which meant that sometimes small portions had to be given and since portions were the same for all children, older children may have not received enough food. Leftover food was taken home by the

cook. While some parents reported children's loss of appetite at home due to the mid-day meal, others scoffed at the idea that 'skimpy' school food could have any effect at all on the children's appetite. Food seemed adequately cooked even though ghoogri demands a long cooking time.

Going to school was reported as a normal activity that children did of their own accord. Sometimes younger siblings of children would accompany their brothers or sisters to school and would then be fed. Some parents said that it was difficult to get the children to stay at school when they wanted them to, due to work at home or in the fields. However some parents took responsibility to make sure that children attended school for reasons that seemed unconnected to mid-day meals. Children generally seemed to enjoy the meals and school, though their attendance in school was not perceived by the teachers to be dependent on mid-day meals. The children who came for the meals were the very young who accompanied their siblings. The menu varied with some schools serving just ghoogri while others served ghoogri and daliya and still others served roti and sabji or dal bati.

Delhi: De *et al.* (2005) looked at the implementation of the mid-day meal programme in an urban setting. The main difference in the implementation of the programme in Delhi is that (as in Bangalore and Hyderabad) the food is cooked in a central kitchen. The study concentrated on the Municipal Corporation of Delhi (MCD) schools which included the highest proportion of children from slum areas and disadvantaged socioeconomic backgrounds. In January 2003, MCD invited expressions of interest from NGOs and caterers to supply cooked food. The financial allocation was INR 2.40 (US\$0.06) per child per day. INR 2 (US\$0.05) was given as cash (for pulses, vegetables, oil and condiments) and 0.40 paise (US\$0.0001) was given as food grains (i.e. rice and wheat to be lifted from the FCI godowns in equal proportion). District Education Officers (DEOs) in different zones in Delhi were given the responsibility of selecting the NGOs and caterers to cook, distribute the food grains to selected NGOs and caterers and reimburse their expenses. There were 11 NGOs running 13 kitchens feeding 25,000-100,000 children annually. To monitor the programme, the Nutrition Foundation of India, an independent organization, conducted surprise visits and the Sri Ram Industrial Research Institute tested samples from the kitchen.

The survey included a school survey and a household survey and was supplemented by visits to some of the kitchens. The school sample consisted of 12 schools in six outlying areas of Delhi where the slum proportion is high. Since school use is maximized through two shifts, both were studied with the research team observing pre-meal, meal and post-meal dynamics. The household sample consisted of ten households from each site selected on the basis of having a child who was enrolled.

The main discrepancies between the programme and the Supreme Court guidelines were that:

- the quantity and quality of food were likely to be less than the minimum stipulated by the court;

- low quality rice was provided by FCI, which required suppliers to exchange it for better quality rice from the market;
- infrastructure facilities (e.g. drinking water supply) to enable the scheme to function well at the school level were not present.

The study found that there were questions about whether the meal was to be considered as a substitute for a child's daily food intake or a supplement to it, given the meal's small size and limited nutrition. It also needed to be linked to other health initiatives. Other possible supplementary benefits, such as inculcating greater nutritional awareness in children and enabling parental involvement, were not being fully explored. The study highlighted a concurrent problem, which was the need to improve educational standards and give attention to children in areas relating to child security. The cooked mid-day meal was having an impact, however, by improving equity and reducing the gender gap. Parents and teachers expressed misunderstandings regarding the scope of the impact of the mid-day meal programme.

Findings from other sources including newspapers and inquiry team reports: Caste discrimination in the school meals programme has been reported by Thorat and Lee (2005), the Dalit Study Circle (2005), Sreenivas (2003), Sainath (2001), Menon (2003) and Ravi (2006). Serious health risks from lack of hygiene (Ravi 2006) and safety hazards have been reported including an accidental death of one child from falling into a vessel of hot sambar, burns to three others in Tamil Nadu (Right to Food Campaign, 2006) and the death of 86 children in Kumbakonam in Tamil Nadu when a spark from burning firewood during noon-meal preparation fell on the thatched roof and caught fire (Sreenivasan, 2004). Some of the problems most commonly reported in the studies include:

- lack of infrastructure facilities, especially with regard to water supply, kitchen sheds, safe storage facilities and utensils;
- lack of maintenance of sheds;
- lack of staff, resulting in teachers and children helping;
- poor management;
- poor monitoring;
- monotonous menus;
- inadequacy of funds, resulting in incomplete reimbursement of fuel and transport costs;
- low and delayed remuneration to cooks and helpers.

Some states have gone beyond the Supreme Court mandate and have tried to extend the programme and address other issues simultaneously. Some have tried to address micronutrient deficiencies (e.g. iron, iodine and vitamins) and have initiated health interventions such as deworming, regular health check ups and free treatment (Khera, 2006). The destitute and the aged in Kerala and Tamil Nadu and widows and pregnant women in Tamil Nadu are also permitted to partake in this scheme. In some states, the scheme has also been extended beyond the I-VII classes. Andhra Pradesh, Chattisgarh, Karnataka and Tamil Nadu have extended the scheme

to cover meals during summer vacations in drought-prone areas (provided by the Supreme Court, Khera, 2006). While cost remains a concern, many states have increased the budgetary allocation for the school meals programme either in cash, kind or supporting facilities and have started providing more variety and nutrition in meals (Jain and Shah, 2005; Mascarenhas, 2006; Afridi, 2005). NGOs and the voluntary sector are also increasingly getting involved, though experiences are not always positive (Ravi, 2006). There are also calls for public-private partnership arrangements to better manage the situation (Financial Express, 2005), involvement of mothers (Times of India, 2005) and communities. Management through centralized kitchens, especially in urban areas, has also been reported (Khera, 2006).

6.4. Arguments against the MDM programme

Shashi Bhushan Singh has argued that there are adverse effects of the MDM programme (see Singh 2004 and reply by Dreze, 2004). Singh makes the case that it is poverty of parents and not unavailability of food that causes poor attendance and early drop-outs due to children being needed for other activities. In nutrition terms, he argues, the reality of the MDM programme leaves much to be desired because corruption ensures that the children get the worst possible food in school. He also contends that it is a weak argument that mid-day meals represent a benefit to the family in terms of a food subsidy; if the parents cannot afford to feed the child, it is more likely that the child will be engaged in income-producing activities and if the parents can afford to feed the child, the mid-day meal is superfluous because the child can always get a better meal at home.

Singh argues that the money spent on mid-day meals would be better spent in improving the quality of education in schools, which is the main reason that even the poor endeavour to send their children to private schools. The MDM programme if anything has only worsened this situation by taking away teachers from their primary task of teaching and children from their primary task of learning. Singh also discounts the perceived popularity of the mid-day meal programme, saying that it is so only because it the school is seen as a centre of benefit distribution and not education. This, he argues, is not in the long-term interest of education.

Finally, Singh argues against the expansion of education, especially when the economy cannot absorb the educated, which causes serious alienation, loss of self respect and aggressiveness. Citing the case of the school in which he studied, Singh states that it now has only two rooms for teaching seven classes. Recently the school decided to sell five months' harvest of rice to raise INR 20,000 (US\$498) in order to build a new classroom which they deemed was more necessary. He advances an argument for reallocating funds from the MDM scheme to schemes that improve the infrastructure of schools.

7. THE 2006 REVISED NP-NSPE

In August, 2005, a subcommittee of the National Steering and Monitoring Committee (NSMC) was constituted to make recommendations on, among other things, the adequacy of norms for central assistance to meet cooking costs and the manner in which the infrastructure gap could be met. Based on the recommendations of the NSMC, the central government approved a revised scheme beginning June 2006; this scheme is currently operational.

7.1. Objectives

The 2006 NP-NSPE states that it aims to address two problems faced by the majority of children in India – hunger and education. Its specific objectives are:

- improving the nutritional status of children in classes I – V in government, local body and government-aided schools and EGS and AIE centres;
- encouraging poor children, belonging to disadvantaged sections, to attend school more regularly and help them concentrate on classroom activities;
- providing nutritional support to children of primary stage in drought-affected areas during summer vacation (Ministry of Human Resources, 2006, 6).

7.2. Components

The nutritional content for the MDM programme was specified to be 450 calories, 12 grams of protein and adequate quantities of micronutrients like iron, folic acid and vitamin A. The programme included children in classes I-V in all government, local body and government-aided schools and EGS and AIE centres. Beginning 16 June 2006, the central government promised to provide the following assistance:

- supply free food grains (e.g. wheat and rice) at 100 grams per child per school day from the nearest FCI godown;
- reimburse the actual cost incurred in transporting food grains from the nearest FCI godown to the primary school, subject to the following ceiling:
 - INR 100 (US\$2.49) per quintal for 11 special category states including Arunachal Pradesh, Assam, Himachal Pradesh, J&K, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttaranchal;
 - INR 75 (US\$1.87) per quintal for all other states and UTs;
- provide assistance for cooking costs at the following rates:
 - states in North-Eastern Region: INR 1.80 (US\$0.04) per child per school day, provided the state government contributes a minimum of 20 paise (US\$0.005);
 - for other states and UTs: INR 1.50 (US\$0.037) per child per school day provided the state government and UT administration contributes a minimum of 50 paise (US\$0.01);

- provide assistance for cooked mid-day meals during summer vacations to school children in areas declared by state governments as “drought-affected”;
- provide assistance to construct kitchen and store in a phased manner up to a maximum of INR 60,000 (US\$1493) per unit. However, because allocations under MDMS for construction of kitchen and store for all schools in the next 2-3 years may not be adequate, states would be expected to proactively pursue convergence with other development programmes for this purpose;
- provide assistance in a phased manner for providing and replacing kitchen devices at an average cost of Rs5,000 per school. States and UT administration will have the flexibility to incur expenditures on the items listed below on the basis of the actual requirements of the school (provided that the overall average for the state and UT administration remains INR 5000, US\$124 per school):
 - cooking devices (e.g. stove and chulha);
 - containers for storage of food grains and other ingredients;
 - utensils for cooking and serving;
- provide assistance to states and UTs for management, monitoring and evaluation (MME) at the rate of 1.8 percent of total assistance on free food grains, transport cost and cooking cost. Another 0.2 percent of this amount will be used at the central government for management, monitoring and evaluation (Ministry of Human Resources, 2006, 7,8).

A list of schemes that could be considered for convergence in the construction of the kitchen and store, for water supply, acquisition of kitchen devices and school health is also provided.

7.3. Multi-level responsibilities

The primary responsibility for the implementation of the programme was vested in the state governments and the union territories. The following management structures were to be put in place at national, state, district, block and local levels.

National Level: An NSMC was to be set up by the Department of School Education and Literacy to oversee the implementation of the programme. The NSMC is mandated to:

- guide the various implementation agencies;
- monitor programme implementation, assess its impact and take corrective steps;
- take action on reports of independent monitoring and evaluation agencies;
- affect coordination and convergence among concerned departments, agencies (e.g. FCI) and schemes;
- mobilize community support and promote public-private partnerships for the programme;
- provide policy advice to central and state governments;

- identify voluntary agencies and other appropriate institutions to undertake training, capacity-building, monitoring and evaluation and research connected with the programme at the national level.

A Programme Approval Board was also to be set up by the Department of School Education and Literacy under the chairpersonship of the Secretary, School Education and Literacy. Membership would include nutrition experts and representatives from the Departments of Women and Child Development, Ministry of Rural Development, Ministry of Panchayat Raj, Planning Commission and Food Corporation of India, among others. The board meets at the beginning of each financial year and considers and sanctions the Annual Work Plan and Budget (AWP&B) submitted by the state governments and UT administrations.

The National Mission for Sarva Shiksha Abhiyan (SSA) was also to review the MDM programme from time to time.

State Level: States and UT administrations were also required to set up Steering and Monitoring Committees at the state and district or block levels to oversee the implementation of the programme. The functions were to be similar to that of the NSMC with necessary changes in details. A representative of the Department of School Education and Literacy, Government of India, would be invited to meetings of the state/UT Steering and Monitoring Committee. Every state government and UT administration was also to designate one of its departments as the nodal department to take responsibility for the implementation of the programme.

Each state was to prescribe its own norms of expenditure for the allocation of funds, taking into account the available central assistance. These norms were to spell out methods for ensuring the uninterrupted supply of cooked food considering possible obstacles that might be encountered in implementation (e.g. temporary interruption of the flow of funds from the centre, temporary interruption of funds from the state to the lower levels, irregular supply of grains from FCI or local transport interruptions, failures in procurement and storage at the local level and absence of cooks at the local level). The Department of School Education and Literacy and the Ministry of Human Resources Development at the national level would convey the district allocation of monies for food grains, cooking costs, construction of kitchens, management, monitoring and evaluation as approved by the Programme Approval Board to the State Nodal Department and the FCI. The State Nodal Department was to convey the district allocations to all District Nodal Agencies and would ensure that the District Nodal Agencies had sub-allocated the monthly district allocation to the subdistrict level which in turn would further allocate it to each school.

District or Block Level: Every state government and UT administration was to designate one nodal officer or agency at the district or block level who would be assigned overall responsibility for effective implementation of the programme at that level. The District Nodal Agency would ensure that each school was informed of its monthly allocation of food grains and financial sanctions for construction of kitchens, cooking costs, cooking devices, etc. It would also identify the transportation

agency to transport food grains from the nearest FCI godown to the school, which could be done once each month. The District Nodal Agency would also take responsibility for developing menus using locally available and culturally acceptable food items.

Local Level: In states that had devolved the function of primary education to panchayats and urban local bodies, the responsibility of implementation and daily supervision of the programme would be assigned to the Gram Panchayat/Municipality. The Gram Panchayat/Municipality could in turn assign responsibility for daily management of the programme at the school level to the Village Education Committee (VEC), School Management and Development Committee (SMDC) or Parent-Teacher Association (PTA). These would be responsible for the programme and report to the Gram Panchayat/Municipality.

The responsibility for cooking or supplying cooked mid-day meals was to be assigned to one of the following:

- local women's or mothers' self-help group;
- local youth club affiliated with the Nehru Yuvak Kendras;
- a voluntary organization fulfilling specified requirements;
- personnel engaged directly by the VEC, SMDC, PTA or Gram Panchayat/Municipality.

In areas where it would be appropriate, cooking in a centralized kitchen could be possible for a cluster of schools, with cooked hot meals transported under hygienic conditions through a reliable transport system to various schools.

7.4. Procurement and distribution

FCI's responsibility was to procure food grains and ensure continuous availability of an adequate food supply. To ensure an uninterrupted supply of food grains, FCI was to allow lifting of food grains for any month or quarter up to one month in advance. For the NP-NSPE 2006, FCI was to issue food grains of the best available quality, which in any case was to be at least Fair Average Quality (FAQ). FCI would appoint a Nodal Officer for each state to take care of problems supplying food grains under the MDM programme. The District Collector or CEO of Zila Panchayat would ensure that food grains of at least FAQ were issued by FCI after joint inspection by a team consisting of FCI and the nominee of the Collector and/or Chief Executive Officer of the district panchayat. FCI was to also keep samples of food grains supplied by it for future verification and analysis And in case of any complaints regarding the quality of food grains supplied.

The state government was to make arrangements for transporting food grains from the nearest FCI depot to each primary school or EGS-AIE centre in the following manner:

- Wherever appropriate, a single government or semi-government agency with statewide jurisdiction and network was to be designated as the State Nodal Transport Agency. This agency would then be responsible for lifting food grains from FCI godowns and delivering them to the designated authority at the taluk or block level. The state government would also need to make arrangements to ensure that the food grains were transported from the taluk or block level to each school in a timely manner.
- Alternatively, the districts, taluks or panchayats could be assigned responsibility for different districts or taluks (or groups of districts or taluks) in the state.

7.5. Role of voluntary organizations

Voluntary organizations could be associated with the programme in supplying the cooked mid-day meals and in providing resource support to the programme such as training and capacity-building, monitoring and evaluation and research. Any body empowered by the state government to do so could award supply work to a voluntary organization for a school or a group of schools. A volunteer organization would be suitable to supply cooked mid-day meals if it met the following conditions:

- The voluntary agencies should not discriminate in any manner on the basis of religion, caste or creed and should not use the programme for propagation of any religious practice.
- The voluntary agency should be a body that is registered under the Societies Registration Act or the Public Trust Act and should have been in existence for a minimum of two years.
- The agency must have a commitment to undertake its supply responsibility on a non-profit basis.
- The agency must have the financial and logistic capacity to supply the mid-day meals on the requisite scale.
- The voluntary agency must commit to abide by the parameters of NP-NSPE 2006, particularly with regard to the definitions of eligible children, nutrition content, etc.
- The voluntary agency must be willing to work with Panchayati Raj Institutions (PRIs) and municipal bodies in accordance with state government guidelines.
- The agency must provide an Annual Report to the body that assigned it work, along with an audited statement of accounts showing all grants received from the state government, both in cash and in kind, duly certified by an approved Chartered Accountant.
- The voluntary organization shall not entrust or subcontract the programme or divert any part of the assistance (e.g. food grains or money) to any other organization or agency.
- The agency must commit to return to the state government any permanent or semi-permanent assets it acquires from the grants received under the programme once it ceases to undertake the supply work.

- All accounts, stock and registers maintained by the voluntary organization should be open to inspection by officers appointed by the state government.
- State governments may prescribe such other conditions, as they may deem appropriate, in addition to the conditions stated above (Ministry of Human Resources, 2006, 18).

Voluntary organizations could also be identified for providing resource support to NP-NSPE 2006, in the form of training and capacity-building programmes, monitoring and evaluation and research studies. Guidelines for this are under consideration.

7.6. Information, education and communication

Messages that were to be communicated to parents of the children in the target group, the community at large and other persons connected with the programme include:

- the **School Mid-Day Meal is meant to be in addition to, and not a substitute for,** [original bold] meals which parents should in any case provide to children at home, or were providing prior to the introduction of the cooked mid-day meal programme;
- the importance of balanced and nutritious meals and how to provide them economically;
- aspects of safety, health and hygiene;
- the importance of community participation, contribution and supervision of the mid-day meal programme;
- the importance of good storage, cooking, serving and eating practices (Ministry of Human Resources, 19).

State governments, UT administrations, PRIs and municipal bodies were expected to undertake the above activities using their regular budget for publicity and also by mobilizing contributions from media groups, philanthropic organizations and the community.

7.7. Financial arrangements

Annual Work Plan and Budget: States and UT administrations place a great deal of importance on the preparation of the Annual Work Plan & Budget (AWP&B). The AWP&Bs are to be based on information collected through participatory processes and maintained at the school level and aggregated at the block, district and state levels with written documentation. In states where the function of education has been transferred to Panchayat Raj Institutions, the school plans were to be consolidated at the Gram Panchayat, Taluk Panchayat and Zilla Panchayat level.

There is a framework for doing this that provides a comprehensive picture of the implementation of the MDM programme. It contains details such as management structure, implementation processes, monitoring systems, sociological composition

of target groups, infrastructure position, evaluation study results, strategies for tackling problems, community participation, best practices and new initiatives. The following information would be collected at the district level:

- anticipated number of working days for schools, EGS and AIE centres;
- average number of children who have received mid-day meals in the previous year, based on the schools' attendance register maintained for the MDM programme and aggregated for the block, district and state levels;
- enrolment in classes I – V and the number of children who are estimated to receive mid-day meals in the current year;
- details about lifting and use of food grains in the previous year;
- details of allocation and use of central assistance for cooking costs in the previous year;
- requirements for food grains and central assistance for cooking costs for the current year;
- details for construction of kitchens;
- details about cooking devices (e.g. gas conversion);
- details about utensils for cooking and serving;
- statement of expenditure describing funds released for management, monitoring and evaluation during the previous year;
- proposal for using funds for management, monitoring and evaluation with a detailed action plan for the current year;
- statement of expenditure describing the transport subsidy received during the previous year.

Assistance for mid-day meals during summer vacations in drought-affected areas was also included with separate guidelines.

Approval: Approval of the AWP&B by the Programme Approval Board was to be contingent on the state governments' and UT administrations' budgetary commitments to contribute toward cooking costs. Based on approval, central assistance would be sanctioned and released for the following:

- district allocation of quantity of food grains;
- district allocation of cooking assistance;
- transport subsidy (based on quantity of food grains allotted to state and UT administration as a whole);
- funds for management, monitoring and evaluation (1.8 percent of above three items above for state and UT administration as a whole);
- district allocation for construction of kitchens;
- district allocation for providing kitchen devices (Ministry of Human Resources , 2006, 28).

Savings: Any savings from the central assistance was to be used in the following order of preference:

- to provide essential micronutrients, deworming medicines and periodic health check-ups;
- to provide better quality mid-day meals;
- to improve infrastructure in primary schools required for mid-day meals (e.g. kitchen and storage rooms, drinking water facilities, smokeless chulha or gas-based cooking);
- to improve supervision, monitoring and evaluation (Ministry of Human Resources, 2006, 28).

Reimbursement to FCI: Before reimbursements were made to FCI, information contained in the bills submitted by FCI to the Ministry of Human Resources and Development would be forwarded to the State Nodal Departments for verification. The State Nodal Departments would have to certify that the figures on quantity of food grains submitted by FCI were correct and in accordance with monthly district reports on the lifting of food grains.

7.8. Monitoring and evaluation

For release of funds, states had to submit periodic returns. The State Nodal Department was to furnish monthly reports about the off-take of food grains, quarterly claims for transport subsidies and quarterly progress reports on the scheme. Also the State Nodal Department was to provide Utilization Certificates to the Ministry of Human Resources and Development with respect to central assistance received through free food grains and food grains in drought-affected areas during summer vacations. These certificates were to be provided for each financial year on 31st March regarding the food grains lifted in the previous year.

The states were also encouraged to 1) employ electronic management information systems, 2) review accounting procedures, practices and reporting systems, 3) evolve comprehensive and easy-to-follow formats, and 4) identify and specify personnel to maintain documents and records. The parameters of assessment were specified as:

- programme parameters, i.e. the manner in which the programme is being implemented to regularly provide all children with a meal of satisfactory quality;
- impact parameters, i.e. the effect, if any, on improving children's nutritional status, regularity of attendance retention and completion of primary education.

The new NP-NSPE guidelines were issued in September 2006. It is therefore too early for systematic evaluations and studies to be reported post NP-NSPE 2006.

8. CONCLUSIONS

The key points that filter through an examination of the Indian MDM programme can be grouped into three categories:

- macroeconomic issues and the PDS;
- issues of health, education and poverty;
- issues of management and information.

8.1. Macroeconomic considerations and the PDS

- Ground-level implementation of the programme results from many levels of policy (i.e. national, state, district, block and local governments and the schools).
- Food grains are off-loaded from the central PDS, which plays a wider role in the economy. The MDM programme complements this wider role in two ways – by cutting costs of the PDS and improving food security.
- The MDM programme cuts costs by:
 - improving the purchasing power of families, which in turn could lead to more food consumption creating greater demand and deterring increases of surplus;
 - allowing the dissemination of excess food stocks to targeted populations, which deters the potential increase of excess stock;
 - helping to keep prices stable due to the increased demand, which decreases the magnitude and need for price support mechanisms for procurement and therefore reduces the costs of the overall food subsidy;
 - decentralizing storage by storing food grains in locations closer to the MDM programme, thus reducing storage costs;
 - increasing overall demand and price stability which can lead to a producer surplus.
- In terms of food security, the greater demand stimulated by the MDM programme extends the coverage both in terms of the number of meals a family can afford and in terms of reaching hitherto excluded populations which decreases the gap between demand surplus and actual surplus in food.

8.2. Health, education and poverty

- The overall effect of the MDM programme on school attendance and retention is positive. However, there is a class bias with lower classes valuing and benefiting from the scheme more.
- The MDM programme can, in certain places, displace the primary function of the schools (i.e. education), reducing them to benefit distribution centres.

- The effect on nutrition is ambiguous and depends upon both the quantity and quality of the meal. If the quantity of food is small, the meal becomes more of a supplement than a substitute. Qualitatively, if the MDM programme is not supplemented by other factors, such as a clean water supply and environmental hygiene, nutritional effects are unlikely.
- A large potential exists for introducing nutrition supplements to excluded populations.
- The target population for the MDM programme can be widened to include other hard-to-reach populations.
- Barriers to mixing castes and classes can temporarily dissolve in the context of the MDM programme.

8.3. Management and information

- The management of the MDM programme leaves much to be desired. The main constraints for improvement are:
 - Lack of available funds;
 - lack of funds to develop infrastructure
 - lack of parental involvement and bottom-up monitoring mechanisms;
 - potential for corruption.
- The MDM programme could benefit from better education and awareness among parents and teachers.

8.4. Implications for home-grown school feeding

In keeping with the above conclusions, a home-grown school feeding programme will have to take into account how it might impact upon:

- the PDS;
- general health;
- education;
- synergy with other programmes;
- poverty;
- management and infrastructure demands;
- information dissemination.

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