INDIA

NUTRITION SUPPORT TO EDUCATION

REPORT OF THE COMMITTEE ON MID-DAY MEALS

सत्यमेव जयते

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EXECUTIVE SUMMARY

* Basically, the Committee has considered nutrition support to education from a larger perspective of relating primary education with nutrition, health, and ICDS. Even as the nutritional support is being extended the committee has suggested linkages to be fostered between ICDS and primary education on the one hand and the public health system, ICDS and primary education on the other so that we can move toward a comprehensive child care as an important component of human resources development.

* Given the resource constraint and more importantly the process required to build up the institutional arrangements essential for successful delivery of nutrition support, there are various options.

* Nutritional support to education could be either in the form of provision of hot meal, of which the food grain components would be 100 gms. per child per day for 200 school days, or equivalent pre-cooked food or through the equivalent supply of 5 kg. of wheat/rice per month per child to the family for 10 months.

* States may have an option of determining the mode of delivery of nutritional support, that is to say, whether they would like to provide hot meal of pre-cooked food or Food For Education or a combination.

* While ultimately the objective should be to cover all elementary education children through a Mid-Day Meal Programme envisaged as an integrated package of early childhood care and education, nutrition, school health and primary education, the entry point for such a comprehensive programme can be nutritional support to elementary education in Employment Assurance Scheme (EAS) blocks with low female literacy rates.

* If the initial coverage is to be larger, all EAS blocks or all EAS blocks as well as ICDS blocks not covered by EAS but have low female literacy could be covered.

* It is also desirable that all blocks in DPEP districts are covered.

* Further, atleast ten per cent of the blocks in a state or union territory may be covered in a state or union territory which is excluded by the criterion selected.

* Classes I-VIII may be covered so that along with the academic and pedagogic measures being taken, nutrition support becomes a means to achieve the NPE objective of free and compulsory education of satisfactory quality to all children below the age of fourteen years before we enter the twenty-fist century.

* Centre would share the cost of implementing the nutritional support of elementary education by providing the food grains required at FCI godowns at central issue prices applicable to RPDS.

* Government of India may take a view on the options available in regard to areas and blocks to be covered.

* Each State may have its own specific scheme with appropriate infrastructure and delivery system within the foodgrain that the State would be entitled to under the option offered by Government of India.

* On - going programmes of nutrition support would be eligible for central support subject to these parametes.

* State should supplement central effort by ensuring transport and delivery of the graint at the village/school and with arrangements for cooking and serving and supply of micro nutritients in case of hot meal variant.

* Simultaneously states may take steps to converge related services and programmes in the field of Early Childhood Care and Education, primary education, nutrition and health.

* Central support would be conditional on States conforming with the parameters approved by the Government of India and satisfactory arrangement being made for the implementation of the programme.

* Initial foodgrain allotment may be related to average attendance of 80 per cent and the enrolment in classes I-VIII in 1993-94.

* The broad principles of allocation of food grains could be as follows

  ** district would be the unit of allocation;
  ** allocation by Government of India would be made every month for a three month period;

  ** the initial allocation could be for a quarter based on 1993-94 enrolment and average eighty per cent attendance;

** from the fourth month of commencement of scheme in a state monthly allocation may be made based on the off-take figures received from FCI (the normal time-lag is 4-5 weeks) and the utilisation certificates and enrolment data received from the states (with a time-lag of 2 months).

* Ways and Means advance of three months to be provided to state Governments to facilitate lifting of foodgrains from FCI grdowns. The Ways and Means advance would be calculated on the following basis:

** initial foodgrain allotment;

** assuming that the allotment of wheat and rice is in the ratio of 50:50 and that rice is of the super fine variety.

* Department of Education would be the nodal agency for implementation of the programme in Government of India; the State Government may designate an appropriate department, preferably Education to be the nodal agency.

* The community and Panchayati Raj institutions, DWACRA groups and non-governmental organisations should be involved in the implementation of the programme so that large cadres for administering the scheme are not created.

PREFACE

I have great pleasure in presenting the report of the Committee on Mid-Day Meals.

The announcement in the 1995-96 budget speech of the Government's decision to participate in a phased expansion of the nutrition support for education schemes implemented by some state governments comes at an important moment in our march towards Universalisation of Elementary Education (UEE). Over the last few years a happy convergence of several events has created a new ambience for elementary education in the country. These include the trends in enrolment and dropout, the Prime Minister's declaration at the Education for All summit of nine high population countries in December, 1993 to redeem the national resolve of allocating six per cent of the national income for education, the national consensus on the criticality of elementary education to national development as brought out in the deliberation of the 46th meeting of the National Development Council (NDC) and the Chief Ministers Conference in February, 1994, the higher plan allocation for elementary education concomitant to economic reforms, the 73rd and 74th Constitutional amendments devolving primary education on democratically elected local bodies, the coverage of more than two third of the country by the Total Literacy Campaigns and the launch of the District Primary Education Programme which builds on the experience of the Centre and States as well as Non-Governmental Organisations in educational development.

2. Household surveys by organisations like the National Sample Survey Organisation and the National Council of Applied Economic Research have brought out that economic and academic matters are equally important for enhancing participation in primary education. Though elementary education is free in all the government and aided schools which account for about 97 per cent of schools in the country, poor families find it difficult to meet the incidental cost of schooling. The phased support to Mid-Day Meal programmes would be an additional and valuable component in the package of economic measures that would help the poor families to defray the indirect cost of education. Together with the measures being taken to improve the quality of education by the Centre and State these economic measures should go a long way in hastening our march towards UEE.

3. I would like to express my grateful thanks to the Members of the Committee but for their active cooperation it would not have been possible to prepare such a comprehensive report in such a short time. They gave valuable insights into the various aspects of nutrition support such as convergence among different sources, options, logistics, community supports and resources.

4. I am grateful to the representatives of the state governments who apprised the committee of the status including the problems confronted by them in implementing mid-day meal programmes.

5. We have only tried to suggest some broad parameters for Central support for a programme of nutrition support for education. The schematic details have to be worked out by the state governments so as to suit their situational imperatives. Our intention is that the states should have maximum flexibility in having such a scheme. Community participation is critical to the success of any social development programme and nutrition support is no exception. NGOs and community leaders should be enlisted for successful implementation of the programme.

6. I also wish to put on record the sincere appreciation of the Committee for the assistance provided by the Secretariat comprising S/Shri T.C. James, B.K. Ray, Krishan Kumar, Om Prakash, S. R. Gupta, S. N. Mishra, E. Krishna Kumaran, V. Nagarajan, Shiv Kumar, Jai Bir Singh, S. Raghavendran, G. N. Yadav and S. S. Butola.

(S.V.GIRI)

CONTENTS

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Appendices

ACRONYMS AND ABBREVIATIONS

ANP	Applied Nutrition Programme
BDO	Block Development Officer
CARE	Co-operative for American Relief Everywhere
CRS	Catholic Relief Service
CWS	Church World Service
DWACRA	Development of Women and Children in Rural Areas
DPEP	District Primary Education Programme
EAS	Employment Assurance Scheme
ENP	Empanded Nutrition Programme
FAO	Food and Agriculture Organisations
FCI	Food Corporation of India
FPS	Fair Price Shop
GER	Gross Enrolment Ratio
ICDS	Integrated Child Development Scheme
JRY	Jawahar Rozgar Yojna
LFL	Low Female Literacy
M	Million
MDM	Mid-Day Meal
Mts	Metric Tonnes
NCERT	National Council for Educational Research and Training
MIS	Management Information System
NCAER	National Council of Applied Economic Research
NGO	Non-Governmental Organisation
NHESS	Nutrition, Health Education and Environmental Sanitation
NIC	National Information Centre
NPE	National Policy on Education
NSS	National Sample Survey
PDS	Public Distribution System
RPDS	Revamped Public Distribution System
Rs.	Rupees
SC	Scheduled Caste
SDO	Sub-Divisional Officer
ST	Scheduled Tribe
UEE	Universalisation of Elementary Education
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNICEF	United Nations International Children's Emergency Fund
USA	United States of America
UTs	Union Territories
VEC	Village Education Committee
WFP	World Food Programme
WHO	World Health Organisation

INTRODUCTION

The Finance Minister in his Budget Speech 1995-96 made the following announcement:

> *Schemes to provide mid-day meals for school children have a beneficial impact not only on child nutrition but also on school attendance. Some of the State Governments have been operating school mid-day meals schemes. As part of the emphasis being laid by this Government on the primary education, and taking into account the comfortable food stocks with the public sector agencies, it is appropriate that the Central Government should be willing to* ***participate*** *in* ***phased expansion*** *of these schemes. The modality of implementing this, with* ***necessary local variations****, will be worked out by a Committee to make it* ***operational in 1995-96****.*

2. Pursuant to the Finance Minister's announcement, exploratory discussions were held in the Conference of State Elementary Education Secretaries and Ministers convened in New Delhi on 3-4 April 1995. The Conference felt that the modalities of phased implementation of central support for nutrition programmes needed to be worked out by a Committee.

3. Accordingly, a Committee under the chairmanship of **Shri S.V. Giri** ,Union Education Secretary was set up on April 19, 1995. The terms of reference of the Committee were to work out a scheme to operationalise the decision of the Central Government to participate in a phased expansion of the mid-day meal schemes taking note of, inter alia,

- coverage
- identification of target group
- modalities of implementation
- implementing agencies
- contribution of state governments
- role of local bodies
- role of community
- linkages with other programmes like ICDS
- infrastructural support at school level including staffing
- financial parameters with due regard to effectiveness, sustainability and replicability
- phased expansion, and
- mechanisms for monitoring and evaluation.

4. Copy of the order constituting the Committee is at **Appendix-I**. Names of Members of the Committee are at **Appendix-II.** List of Members of the Secretariat of the Committee is at **Appendix III.**

5. The Committee held four meetings on 4, 10, 17 and 24th May, 1995 and also held wide ranging consultations with the representatives of the State Governments of Bihar, Madhya Pradesh, Rajasthan and Delhi apart from Gujarat, Orissa, Tamil Nadu and Uttar Pradesh whose representatives were on the Committee. All the State Governments and Union Territory Administrations were requested to furnish information on Mid-Day Meal Schemes, if any, in operation in the state as well as their views on the phased support Central Government can give for expansion of Mid-Day Meal Scheme. The Committee had also perused considerable literature on the subject, including reports of various evaluation studies. A select bibliography is at **Appendix-IV.**

CHAPTER I

HISTORICAL BACKGROUND

1.1 The concept of Mid-Day Meal has a long history in India. In 1925, a Mid-Day Meal Programme was introduced for children belonging to poor socio-economic status in Madras Corporation area. In 1928, Keshav Academy of Calcutta introduced compulsory Mid-Day Tiffin for school boys on payment basis at the rate of four annas per child per month. In 1941, in parts of Kerala, the School Lunch Programme was started. In 1942, Bombay started implementing a free Mid-Day Meal Scheme. A Mid-Day Meal Scheme was introduced in Bangalore city in 1946, to provide cooked rice and yoghurt. In 1953, Uttar Pradesh Government introduced a scheme, on voluntary basis, to provide meals consisting of boiled or roasted or sprouted grams, ground-nut, puffed rice, boiled potatoes or seasonal fruits. In the 1950s, many States came to introduce mid-day meal programmes with the assistance of different international agencies like UNICEF, FAO and WHO. International voluntary/charity organisations like Catholic Relief Service (CRS), Church World Service (CWS), CARE, USA's Meals for Million, etc, also came forward to assist in these programmes. During 1958-59, an Expanded Nutrition Programme (ENP) jointly by FAO, WHO, UNICEF and Government of India was introduced, which was subsequently expanded into Applied Nutrition Programme (ANP).

1.2 The idea of a National Mid-Day Meal Programme had been considered again and again for over a decade. In 1982, 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.

1.3 In 1983, the Department of Education in the Central Government after inter-ministerial consultations, prepared a scheme as per the guidelines of the World Food Programme (WFP). As per this, 13.6 million SC children and 10.09 ST girls in classes I-V were to be covered in 15 States and 3 Union Territories, where the enrolment of SC/ST girls was less than 79 per cent. The food material required as aid from WFP for one year was estimated to be 392,696 mts. of food grains, 19,635 mts. edible/butter oil, and 19,635 mts. of milk powder. In monetary terms, the total annual cost of commodity assistance was $163.27 M. (Rs.1551.17 M. at an exchange rate of Rs.9.50/US $). The other cost, such as transportation, handling, cooking, etc., were to be borne by the State Governments. The proposal was circulated among States and UTs. Many States were willing to implement the programme. However, some States expressed certain difficulties. Rajasthan, for example, intimated that in case WFP assistance was withdrawn, the State would not be able to continue the programme on its own. Uttar Pradesh intimated that it would not be practicable to have mid-day meals only for SC/ST children.

1.4 A programme for Central Government assistance for mid-day meals for children in primary schools throughout the country was again considered during the year 1984-85. The broad rationale for the programme were the following:

* Mid-day meal programme for primary schools could be construed as an anti-poverty educational programme;

* Implementation of this programme for the age-group of 6-11 may maximise enrolments and reduce school drop-out rates and this would be important from the point of view of universalisation of elementary education;

* This would help in providing nutrition to the under-fed and under - nourished children in the rural areas; provision of meals to children in schools would also 'release foodgrains' in poor families for non-school going children; and, in effect, this would be an investment in human resource

The broad features of the programme were:

* Coverage of primary school children in a phased manner so that by the end of the seventh Plan, 9.54 crore children could be covered; the estimated expenditure for the whole plan being Rs.4000 crore,

* Provision of uniform nutrition for the children at 300 calories per day with 12-15 grams of protein (100 grams of cereal, 10 grams of dal and 5 grams of edible oil);

* Expenditure per child, including expenses on administration to be 60 paise;

* Food Corporation of India to release food grains at Central Issue Prices; the value of which to be counted against Central assistance to State, estimated Central assistance for the year 1989-90 being reckoned at Rs.623.50 crore;

* No elaborate administrative infrastructure to be built up;
* Linkage of implementation of the scheme with existing civil supplies distribution system;

* Supply of rations to be in kind and deliveries thereof be made through State/cooperative agencies;

* Central assistance to be limited to 50 per cent;

* Each State to have its own specific scheme with appropriate infrastructure and delivery systems subject to laid down parameters;

* Scheme to be implemented during the 7th Plan period in a phased manner;

* Funds to be provided, for the programme not to be construed as part of the outlay under the Head 'Education';

* Funds required for the programme to come from provisions earmarked for poverty alleviation scheme.

* While wheat and rice could be supplied through the Food Corporation of India, States would have to make their own arrangements for pulses and oil;

* States should evolve suitable logistics and make arrangements for cooks, helpers, administration, supervision and monitoring;

* Implementation of the scheme to start with ICDS blocks; monitoring mechanism evolved under ICDS to be adopted/adapted for mid-day meal scheme as well;

* Community involvement in the implementation of the scheme;

It was also recognised that the scheme had certain inherent problems such as possibilities of leakage, inadequacy of buildings, non-attendance of teachers, participation by non-school going children, abuse by those incharge, etc. It was, however, presumed that the problems would get addressed as the programme got moving. The Planning Commission prepared a set of guidelines for implementation of the scheme during the seventh Five Year Plan. This is in **Annexure-I.** However, the programme was not approved as part of the seventh Plan, nor were proposals taken up for consideration during the annual plans, apparently due to resource constraints.

1.5 The Fifth All India Educational Survey had brought out the following facts on the coverage of mid-day meals in 1986. Free mid-day meals were provided to 13.67 million or 15.91 per cent primary school students and to 7.07 million or 25.93 per cent upper primary school students. Inter-state variations ranged from nil coverage in Manipur to 46.14 per cent in Sikkim, 47.55 per cent in Tamil Nadu, 47.84 per cent in West Bengal, 53.23 per cent in Dadra and Nagar Haveli, 56.07 per cent in Tripura and 59.94 per cent in Lakshadweep at the primary level. Mid-day meals were provided in 27.9 per cent primary, 24.28 per cent upper primary, 7.20 per cent secondary and 11.82 per cent higher secondary schools. In rural areas, 28.28 per cent primary, 25.06 per cent upper primary, 7.51 per cent secondary and 11.8 per cent higher secondary schools had provision for mid - day meals as against 24.75 per cent primary, 20.91 per cent upper primary, 6.31 per cent secondary and 11.84 per cent higher secondary schools in urban areas. There were 22.6 million students who were availing of this facility at all levels of school education; of these 78.41 per cent were studying in rural schools, 40.98 per cent were girls, 20.05 per cent were Scheduled Caste Children and 12.81 per cent were Scheduled Tribe children.

1.6 In December 1988, the Department of Education formulated a proposal for covering 994 ICDS blocks with concentration of SC/ST children. It was suggested that if the Programme was to be implemented in all the ICDS blocks, (994) with concentration of tribal and scheduled caste population @ Re.1/- per child per day for primary school children, the annual expenditure would come to about Rs.277.32 crore. The important elements of the guidelines for this scheme, which were based on the earlier guidelines prepared by the Planning Commission, were the following:

* The scheme should cover all children in primary classes in government, government - aided and local body schools.

* Mid-day meals should be provided on all school working days.

* Ration for mid-day meals may be as follows:-

  (a) Cereals - 100 gms per day per child

  (b) Pulses - 10 " " "
  (Dal)

  (c) Edible Oil - 5 " " "

  (d) Fuel

* CARE assistance, if any, should be excluded.

* Cereals and, to the extent possible, pulses, edible oil and condiments should be supplied to the schools through authorised State agencies; State Governments may make use of the distribution infrastructure of Civil Supplies Corporations, cooperative agencies or other departmental outlets; Food Corporation of India would deliver stocks of wheat and rice to the State Government agencies nominated for the purpose in its depots at central issue prices.

* To the maximum extent possible, wheat should be utilised for mid-day meals, supply of rice being restricted to pre-dominantly rice eating areas. Other grains locally available could also be utilised by the States.

* States should make arrangements for appointment of cooks, helpers and supervisors. As far as possible, the cook should be a woman. The cooks and helpers should be from the same village. The State should make necessary arrangements for storage of food materials, cooking and service.

* Maximum public cooperation should be sought involving local people's representatives to oversee smooth flow of materials and service of meals.

* For the management of the scheme parallel administrative machinery should not be built up. Existing infrastructure should be used with the fullest feasible delegation of powers.

* At the District level, there should be a Supervisory Committee under the Chairmanship of the District Collector; at the State level, there should be a Committee under the Chief Secretary with members drawn from different concerned Departments. At the Central level also, there should be a Monitoring Committee with representatives from different Departments.

1.7 In 1990-91, 17 State Governments were implementing a Mid-day Meal Programme for primary school children between the age-group 6-11 years with varying degrees of coverage. Twelve States, namely, Goa, Gujarat, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Mizoram, Nagaland, Sikkim, Tamil Nadu, Tripura and Uttar Pradesh, were implementing a Mid-Day Meal Programme from out of their own resources. In three States, namely, Karnataka, Orissa and West Bengal, the programme was being implemented partially from out of their own resources and partially with assistance from CARE. Two States, namely, Andhra Pradesh and Rajasthan were running the Programme only with CARE assistance and discontinued on stoppage of the assistance.

CHAPTER II

OBJECTIVES

2.1 In the Indian context, the objective of a Mid-day Meal scheme would be two fold; (i) enhance the nutrition status of school-age children and (ii) hasten the march to universalisation of elementary education.

NUTRITIONAL STATUS OF SCHOOL GOING CHILDREN

2.2 Information on the nutrition status of rural children of age group 6-11 is provided by Diet and Nutrition Surveys in rural areas conducted by National Nutrition Monitoring Bureau in the eight states of Andhra Pradesh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Tamil Nadu and Orissa(1990-92). Only 5.57 per cent of the children surveyed have normal nutritional status while the rest have varying degrees of malnutrition (See Table 2.1 and Chart I); 12.22 per cent of the boys and 15.59 per cent of the girls suffer from severe malnutrition.

TABLE - 2.1

NUTRITIONAL STATUS OF 6-11 YEAR RURAL CHILDREN
(Criterion : Weight for age*)

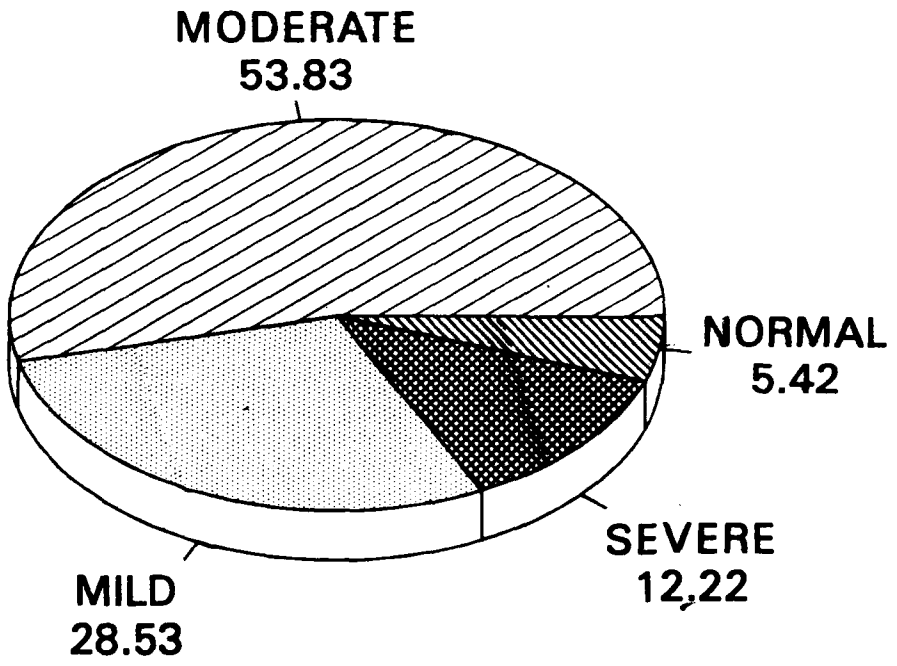
Sex	Percentage of children with nutritional grades of Degree of Malnutrition			
	Severe	Moderate	Mild	Normal
Boys	12.22	53.83	28.53	5.42
Girls	15.59	50.45	28.23	5.73
Pooled	13.89	52.16	28.38	5.57

[illegible] standard for age

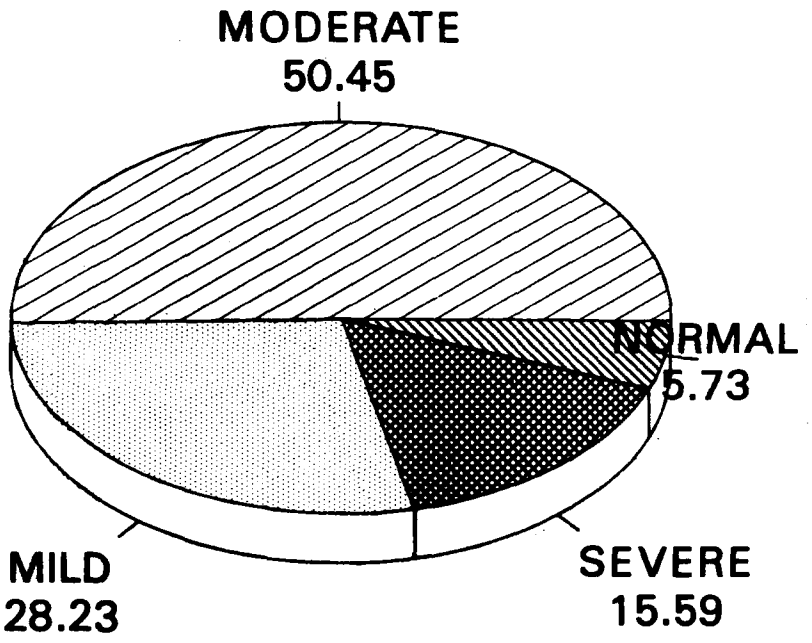
Source : NNMB (Rural) surveys in 8 [illegible] (1990-92)

The classification of nutritional status was based on normative weight for the age; children with a weight of 90 per cent and above the normative weight for the age are classified as belonging to 'normal' nutrition grade; the rest are deemed to be malnourished. A 75-90 per cent of the weight norm is classified as mild degree

DISTRIBUTION OF CHILDREN (6-11 YEARS)
ACCORDING TO NUTRITIONAL STATUS (CRITERION : WEIGHT FOR AGE)



BOYS



GIRLS

* NCHS Standards

Source: NNMB (Rural) Surveys in 8 States (1990-92)

CMIS

malnutrition, 60-75 per cent moderate degree and below 60 per cent severe degree. The dietary consumption pattern of these children was assessed using a 24 hour recall method. It was observed that the children have a deficit of the magnitude of about 628 kcal of energy and 6-7 gm protein. The energy gap constituted about 1/3rd of the daily calorie requirement. If the energy gap is bridged, the protein gap will be automatically filled. The data on the dietary intake are presented in Table 2.2.

TABLE - 2.2

MEAN PROTEIN AND CALORIE INTAKES OF RURAL CHILDREN OF 6-11 YEARS AGE

Age (Years)	Boys		Girls	
	Protein (g)	Calories (Kcal)	Protein (g)	Calories (Kcal)
5-6	28.45	1102	27.86	1070
6-7	31.00	1163	29.20	1104
7-8	32.56	1252	31.45	1211
8-9	36.50	1379	36.08	1380
9-10	37.85	1458	37.55	1443
Mean Intakes	33.1	1272	32.8	1257
Mean RDI	39.5	1903	40.0	1866

		Proteins (g)	Calories (Kcal)
Mean Deficit	Boys	6.4	630
	Girls	7.2	609
	Pooled	6.8	620

RDI : Recommended Dietary Intake.

2.3 Earlier studies by D. Agarwal and others (1989) confirm that malnutrition is pervasive among school children belonging to poor, rural population. These studies also bring out the prevalence of vitamin A deficiency; for instance, in Uttar Pradesh 4.1 per cent of school children had ocular signs of vitamin A deficiency, which indicates an advanced condition. According to the eminent nutrition scientist, C. Gopalan at least twenty per cent of children in rural schools at any given point of time suffer from chronic or acute infections such as otitis media, sore throat, rheumatic heart disease, etc. An annotated bibliography of the prevalence of malnutrition and parasites in developing countries brings out that 48.4 per cent school age children have chronic malnutrition, 69.4 per cent iron deficiency, 55.0 per cent iodine deficiency and 48 per cent parasites. The comparative picture of a few South Asian countries is presented in Table 2.3. However, care should be used when comparing among countries or among deficiencies.

TABLE 2.3

PERCENTAGE OF SCHOOL-AGE CHILDREN WITH NUTRITIONALDEFICIENCIES AND PARASITES, VARIOUS YEARS

Country	Chronic malnutrition(a)	Iron deficiency	Iodine deficiency	Parasites
Low-income countries				
Bangladesh	71.0	74.0	-	-
Bhutan	-	-	47.0	-
Burma	-	-	70.0	86.7
China	5.0	86.9	-	2.4
India	48.4	69.4	55.0	48.0
Kampuchea Democratic	67.3	-	-	-
Sri Lanka	-	-	12.0	-

Table 2.3 (contd.)

Country	Chronic malnutrition(a)	Iron deficiency	Iodine deficiency	Parasites
Lower-middle-income countries				
Indonesia	69.9	-	72.5	-
Philippines	59.4	20.6	15.1	87.7
Thailand	8.0	11.4	23.5	-
Malaysia	52.7	-	-	89.0

- Not available

Note : This table lists available data on prevalence for school-age children. The studies refer to different times, employ different sample cases and use different standards. Care should be used when comparing among countries or among deficiencies.

a: Defined by height-for-age and anthropometric measurements.

Source: Marlaine E. Lockheed, Adriaan M. Verspoor and associates, **Improving Primary Education in Developing Countries, 1991**

2.4 As has been observed by C. Gopalan,

That the children in our schools represent a vital segment of our population is obvious. They are our valuable human resources and will contribute to the bulk of our workforce by the turn of the century. Their health, nutritional status and educational attainments will, to a considerable extent, determine the quality of our nation in the years to come....

While it is true that the pre-school age group is the most important and the most vulnerable, the children of school age represent the child population which has managed to survive the perils and hazards of infancy and early childhood and has arrived at late childhood and adolescence; many of these children still carry the scars of malnutrition and disease of their earlier years; many of them also suffer from continuing malnutrition and disease....

The relationship between scholastic performance and nutritional status of the children has also been established in some studies. Unlike the pre-school period which is associated with relatively high mortality, the great majority of even malnourished children of the school age will live to grow into

adulthood, and will eventually become our future adult citizens possibly with poor physical stamina and varying degrees of functional incompetence.

2.5 In this background, measures to enhance the nutritional status of school age children are important in their own right. Several studies have explored the relationship between children's nutrition status and school indicators such as, age of enrolment, grade attainment, absenteeism, achievement tests scores, general intelligence, and performance on selected cognitive tasks, including concentration in the class rooms (Lockheed, Verspoor and others 1991). Protein energy malnutrition is generally caused by a deficient diet and may be exacerbated by infection with parasites. Though there is wide variation there is a significant positive relationship between nutritional status on the one hand and mental ability and academic achievement on the other. Children who are temporarily hungry - typically as a result of not eating breakfast - are generally more easily distracted in class more than those who have eaten. Three micro nutrients generally affect school performance; they are iodine, iron and vitamin A. Persistent illness that contribute to repeated absence from school, heavy parasitic loads (which contribute both to school absences and malnutrition), and hearing and vision impairment adversely affect school learning.

2.6 **Annexure-II** summarises the findings of Indian and international studies on the impact of nutritional interventions on enrolment, retention and achievement in schools. While it is difficult to summarise the findings of these different studies, what is evident is that school nutrition programmes do improve attendance. Whether the improvement is due to transfer of income to poor families or due to nutritional value is an academic debate that does not detract from the fact that attendance improves; further, measures to address malnutrition, deficiency of micronutritents, and hearing and vision impairment do have a tangible impact on learning achievement. The studies also caution that the programmes should carefully be designed so that they are cost-effective and do not impinge on teaching and learning time. The studies also highlight the need to sustain nutritional support programmes once introduced; countries which have introduced school feeding programmes with external commodity support found it necessary to withdraw the programmes when food aid ceased with adverse impact on school participation. It is also necessary to ensure that the attendance induced by nutrition support extends to the entire school hours, for the programme to have any tangible effect on learning achievement.

UNIVERSALISATION OF ELEMENTARY EDUCATION

2.7 Ever since independence, the country has been striving to universalise elementary education, which is a constitutional obligation. The endeavours to universalise received a fillip from the National Policy of Education(NPE), 1986

It categorically stated that the new Policy [illegible] on the removal of disparities, and equalisation of educational opportunities by attending to the special needs of those who have been denied equality so far. Its statement on education for women's equality is very forthright and categorical. Education is perceived to be an agent of basic change in the status of women, and

playing a positive, interventionist role in the empowerment of women to neutralise the accumulated distortions of the past. World over, Universalisation of Elementary Education (UEE) is increasingly perceived as a civil right indispensable for human development, be it socio-economic development, poverty eradication, democratic practice or good governance. Equity in education is the inevitable prelude to social equity at large.

2.8 Apart from enunciating the vision and policy postulates, the National Policy on Education(NPE), 1986 and its Programme of Action (POA), which were updated in 1992, also outline concrete strategies for universalising elementary education. These strategies include micro-planning, decentralisation of educational administration, active role for communities and Non-Governmental Organisations (NGOs), a systematic and large programme for non-formal education to meet the basic educational needs of the millions of out of school children whom the school cannot reach, improving school facilities through Operation Blackboard, improving teacher competence and motivation and laying down minimum levels of learning as an anchor to improve the content and process of education. A holistic initiative which brings together all these strategies is the District Primary Education Programme (DPEP).

2.9 By any measure, India has made great strides towards the goal of universalisation of elementary education (UEE) since 1947. There has been significant progress in terms of spread of institutions, participation and equalisation of educational opportunities. The literacy rate has nearly trebled since Independence. Access to schooling has been substantially achieved at the primary stage with 95 per cent of the rural population having access to primary schools within a one kilometre radius. The number of primary and upper-primary schools in the country has gone up from 223 thousands in 1950-51 to 728 thousands in 1993-94.

2.10 Enrolment at the primary stage increased about five fold from 19.2 million to 108.2 million in 1993-94; the increase in the upper primary stage is far higher - from 3.1 million to 39.9 million. An analysis of the enrolment data reveals that the population of children moving up from the primary to the upper primary stage has been increasing steadily, from 16.3 per cent in 1950-51 to 42.5 per cent in 1993-94. The gross enrolment ratios of children in the age group 6-11 increased from 42.6 per cent in 1950-51 to 104.5 per cent in 1993-94. Likewise, the gross enrolment of 11-14 age group increased from 12.7 per cent in 1950-51 to 67.7 per cent in 1993-94.

2.11 There is, however, a strong regional dimension to UEE. While the gross enrolment ratios (GER) at the primary stage in the country as a whole and in most of the states exceed 100 per cent, there are quite a few states where the ratio is considerably lower. These include Uttar Pradesh, Bihar, Rajasthan, Haryana, Jammu and Kashmir, and Meghalaya. At the upper primary stage these states and, in addition, Andhra Pradesh, Orissa and Sikkim have GERs lower than the national average. The literacy rates of most of these states are also lower than the national average. The problem gets more complicated as the drop-out rates, though

declining, continue to be high. As per data for 1993-94, 36.32 per cent of the children who entered Class I drop out before reaching Class V and 52.80 per cent of the children drop out before reaching Class VIII. Regional disparities abound in rates of the drop-outs also.

2.12 As with any educational indicator, gender disparities are conspicuous in regard to enrolment and retention. Girls' enrolment has grown at the primary stage from 5.4 million in 1950-51 to 46.4 million in 1993-94 and at the upper primary stage from 0.5 million to 15.7 million. The rate of growth of enrolment of girls has been higher than that of boys but disparities still persist -- girls still account for only 42.88 per cent of the enrolment at the primary stage and 39.34 per cent at the upper primary stage. The drop-out rates of girls at the primary as well as the upper primary stage are higher than those of boys.

2.13 Gender disparities also have a regional dimension. High female literacy states (above 50 per cent) have by and large universalised primary enrolment among girls. Even in regard to upper primary enrolments Kerala, Goa, Pondicherry and Lakshadweep are very well. In states with medium female literacy status (40-50 per cent) enrolment of girls appears to be satisfactory at the primary level. The situation in low female literacy states (20-40 per cent) causes concern. These states have more than half of the country's population, with just four of them (Utter Pradesh, Bihar, Madhya Pradesh and Rajasthan) accounting for 40 per cent of the country's population.

2.14 A third dimension of UEE is the participation in the educational process by the Scheduled Castes and Scheduled Tribes. According to the 1991 census, the population of Scheduled Castes (SCs) was 138.2 million (16.33 per cent) and that of Scheduled Tribes (STs) 67.8 million (8.01 per cent) of the country's total population. Because of the affirmative policies of the government, the enrolment of SCs and STs has increased considerably at the primary stage. The participation of SCs and STs is now more or less in proportion to their share in population at the primary level. Drop-outs, though declining over the years, are significantly large. Both SC and ST populations are not homogeneous target groups in all respects. There are wide variations between different SC and ST groups regionally. Thus SC girls in Kerala are likely to be better placed than non-SC boys in some of the more backward states and districts. Gender disparities are very conspicuous among SCs and STs also.

2.15 Though concerted efforts are being made by central and state governments, UEE is still in the distant horizon. Recent studies on trends of enrolment indicate that going by past trends UEE is likely to be achieved by 2006. It is at the upper primary level that greater efforts are needed, as the gross enrolment needed to achieve universal participation in primary education (classes I-V) is likely to be achieved by 2001 (Arun C. Mehta, 1994). The past cannot and should not necessarily be the guide for the future. The nation as a whole should put in the extra efforts needed to accelerate the trends so that we can ensure free and compulsory education of satisfactory quality to all children upto 14 years of age before we enter the twenty-first century, as envisaged in the NPE, 1986.

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2.16 If we are to achieve the goal of UEE, we have to squarely address the reasons which inhibit full participation in the educational process. The 42nd round of National Sample Survey (July 1986-June 1987) provides valuable information on the reasons for non-enrolment and dropouts. Non-availability of schooling facilities accounts for only about 10 per cent of the non-enrolled children in rural India and about 8 per cent in urban areas; the difference between sexes being very small in rural areas but somewhat larger in urban areas. Nearly 30 per cent of the children both in rural and urban India gave the reason for having never enrolled as being "not interested". About 52 per cent of the urban boys and 29 per cent of urban girls could not avail of educational services because of participation in household economic activity or other economic reasons. Attending to domestic chores restrained about one per cent boys, both in rural as well as in urban areas, from ever enrolling as students. Failure was given as the reason for discontinuation of studies by 60.3 per cent of rural and 20.3 per cent of urban dropouts. An important fact in this study was that proportion of non-enrolled children decreases with increase in per capita household income. Percentage distribution of dropouts by reasons for discontinuance for rural and urban sector is given in Table 2.4. Suffice to say that economic and non-economic factors almost equally account for non-participation.

TABLE - 2.4

PERCENTAGE DISTRIBUTION OF DROPOUTS BY REASON FOR DISCONTINUANCE
NSS 42nd Round, July 1986-June 1987

Reason for Discontinuance	Rural		Urban	
	Male	Female	Male	Female
Not interested in education/ further study	26.6	33.3	23.6	28.5
Participated in household economic activities	26.8	9.4	22.8	6.7
Other economic reasons	20.6	15.0	24.2	15.4
Domestic chores	2.0	14.3	2.2	15.9
Failure	18.4	16.7	21.3	18.8
Others	5.6	11.5	6.0	14.7
All	100.0	100.0	100.0	100.0

2.17 The 1993 survey of the National Council of Applied Economic Research (NCAER) brings out the welcome fact that since 1986 proportion of 'never-enrolled' children has come down significantly in all states. In quite a few States like Maharashtra, Gujarat and Karnataka, not to speak of Kerala and Tamil Nadu, the proportion has reached negligible levels. However, the levels are still unconscionably high in many states like Bihar, Madhya Pradesh, Uttar Pradesh, Rajasthan and Andhra Pradesh.

2.18 The strategy to reduce dropout rates has to be multipronged. The six elements of the strategy that is being tried out are: (i) creation of parental awareness and community mobilisation; (ii) utilization of institutional mechanism created through the 73rd and 74th Constitution amendments; (iii) provision of economic incentives to help poor families defray the cost of education; (iv) convergence of services in the areas of ICDS, Primary education, primary health and creches; (v) reorganising the content and process of education including adjustments of school calendar to the local situations, improving quality and making learning child centred and enjoyable through attractive school environment and teacher motivation and training; and, lastly, (vi) implementation of the new District Primary Education Programme initiative which is essentially targetted towards low female literacy districts.

2.19 Free education, guaranteed in the Constitution, cannot be taken to mean a 'no fee' system only. Even when tuition is free, however, the direct and indirect costs can be too high to ensure enrolment and learning. A number of incentives such as supply of textbooks and uniforms are being provided by many state governments to targetted groups to help reduce the direct costs of elementary education. A properly designed nutritional support can be an additional incentive to help poor families meet expenditure incidental to effective learning and thereby can be a component of the package of economic, pedagogical and institutional measures required for universalisation of elementary education. Effective delivery of nutrition support is inconceivable without the facilitative role of the local community. It is a happy augury that in pursuance of the 73rd and 74th Constitutional amendments, local communities are being empowered; particularly a large number of women have begun to play an active role in democratic governance at the grass roots. This together with other initiatives including a strong political commitment of the centre and state to universalise elementary education, the generation of demand for education through the total literacy campaigns and the decision of the government to redeem the national pledge of allocating six per cent of the national income for education have created a new ambience for universalisation of elementary education. The success of the 'Green Revolution' and development of a large scale public distribution system have also created conditions facilitative for nutrition support for education. Therefore, time is now opportune for a nutrition programme for elementary education. But we have to bear in mind that, to achieve the objectives, it is to be ensured that the incentive schemes in place are better delivered, the procedures are not cumbersome, the intended benefits reach the intended families in time and in full measure.

2.20 Through the ICDS, which is on its way to being universalised, an attempt is being made to have a broad-based nutritional support to pre-school children of poor families; nutritional support to elementary education would be a continuation of the efforts at the pre-school stage.

2.21 A programme of nutrition support to education is, by its very nature, part of a total package of poverty alleviation measures aimed at improving the general health of people. It will, therefore, not be right to look upon the expenditure on such a programme as one devolving on education budget, either of the centre or of the states. In any case, at no point of time was the outlay on nutritional support to elementary education reckoned as educational expenditure. It was the Education Commission (1964-66), more popularly called the Kothari Commission, which postulated the normative expenditure on education at six per cent of the GNP; it is this postulate which is built into the National Policy on Education, 1968 and the National Policy on Education, 1986 and which is now sought to be realised by the end of the Ninth Plan. The calculations of the Kothari Commission do not take into account the likely expenditure on nutritional support. Hence the central or state support to nutrition at the elementary stage should be excluded from the investment that would flow from the operationalisation of the six per cent norm.

CHAPTER III

MID-DAY MEALS IN OPERATION

3.1 According to the information received from the Planning Commission, thirteen states and five union territories were administering mid-day meal programmes as of 31st December, 1994. In all 20.48 million children were covered; four states Tamil Nadu (36.13 per cent of total coverage in the country), Kerala (13.67), Gujarat (12.89) and Karnataka (6.35) together accounted for 86.35 per cent of the children covered. (See Table 3.1)

Table 3.1

MID-DAY MEAL PROGRAMMES:DETAILS OF STATEWISE PHYSICAL COVERAGE AS ON 31ST MARCH, 1994

S.No.	States	Coverage (Figures in millions)
1.	Goa	0.007
2.	Gujarat	2.6
3.	Karnataka	1.3
4.	Kerala	2.8
5.	Madhya Pradesh	0.951
6.	Maharashtra	0.173
7.	Mizoram	0.020
8.	Nagaland	0.015
9.	Orissa	0.752
10.	Sikkim	0.039
11.	Tamil Nadu	7.4
12.	Tripura	0.320
13.	West Bengal	3.6
	Total (States)	19.977
	Union Territories (UTs):	
14.	Chandigarh	0.029
15.	Daman & Diu	0.007
16.	Delhi	0.365
17.	Pondicherry	0.103
	Total (UTs)	0.504
	Grand Total: (States & UTS)	20.481

3.2 All the States and Union Territories were requested to furnish information on the mid-day meal programmes in operation as well as their views as to how the Central Government can support a phased expansion of the Mid-Day Meal programmes. Responses were received from Bihar, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Madhya Pradesh, Meghalaya, Orissa, Rajasthan, Tamil Nadu, West Bengal, Delhi and Pondicherry. The programme is not implemented in Haryana, Jammu and Kashmir, Madhya Pradesh, Meghalaya, Orissa and Rajasthan.

3.3 Details as reported by the State Governments are furnished in Table 3.2. Detailed comments of States are at **Annexure-III.**

3.4 In Tamil Nadu, Pondicherry, Bihar and Gujarat food is prepared either in the school or its vicinity and served hot in the school while in Karnataka and Delhi pre-cooked food is served. Infact, Karnataka provides two kinds of food: a 'ready-to-eat processed energy food' and raw food in the form of soya mixed wheat powder, wheat corn, which is issued in one kg. carry-home packets every month for eight months// In Gujarat, during 1990-92, the service of cooked food was dispensed with; instead wheat at the rate of 10kg. per family was being distributed to school children belonging to poor families subject to 70 per cent attendance as certified by the school principal. Later, the state reverted to the practice of serving cooked food// West Bengal adopts a combination; bread in Calcutta and several districts and cooked food in some other districts.

3.5 In the menu for hot meal there is wide variety. This is as it should be. In Tamil Nadu cooked rice and sambar made of dhal, soya and vegetables, condiments and oil are provided. In addition to the regular noon-meal, one boiled egg is given once every fortnight. //In Gujarat, the meal contains, wheat or joar, or bajra or maize, rice, pulses, cooking oil, vegetables and condiments. The menu is decided locally daily// In West Bengal, under the cooked food category, bulgur wheat and salad oil are provided. In Pondicherry, the meal consists of rice, sambar and poriyal.

3.6 Bihar stands apart in the matter of mid-day meal programme. Here the beneficiaries are served 100 grams meat per child per day twice a week on Mondays and Thursdays. The daily menu consists of wheat, dal, vegetables with condiments and cooking oil. Such a menu, of course, is costlier than the ones in other states, costing Rs.5.40 per child per day.

3.7 There are wide variations in coverage. In Bihar the programme covers 23,800 children in 119 Charwah schools. In Karnataka 3.7 million children in all government primary schools in the state studying in primary classes are covered by the programme. In Gujarat all primary students are eligible on school working days, i.e. 200 days a year; however, as against an enrolment of 5.8 million only about 2.7 million children avail of the programme; surprisingly, the participation in the programme is about 49 per cent in the relatively less developed Northern Gujarat and Saurashtra, while it is higher, of the order of 75 per cent, in Central and Southern Gujarat. In Tamil Nadu, all students of all schools in the state from

TABLE - 3.2
SUMMARY STATEMENT OF EXISTING MID-DAY MEAL SCHEMES

S. No.	State	Scope & Coverage	Actual No. of beneficiaries	Type of food served	Calorific Value	Unit cost
1.	2.	3.	4.	5.	6.	7.
1.	Tamil Nadu	(i) Age Group (2-4 yrs) (ii) Age Group (5-9 yrs) (iii) Age Group (10-15 yrs)	12,00,000 43,00,000 19,00,000 74,00,000	Hot meal	(i) 405 (ii) 500 (iii) 600	(i) 0.95 (ii) 1.09 (iii) 1.22 + 20% admn. exp.
2.	Gujarat	Children in all Primary Schools (classes I-V)	27,00,000	Hot meal	450	1.50
3.	Bihar	Working children	23,800	Hot meal	-	5.40
4.	Karnataka	All govt. primary schools (classes I-IV)	37,00,000	Pre-processed+ Raw food	-	-
5.	Pondicherry	Govt. primary and middle schools (classes I-VIII)	1,03,007	Hot meal		1.80 (in schools) 1.75 (DWACRA)
6.	West Bengal	Primary school children (6-11 years)	31,86,000	(i) Pre-processed (75 gms) (ii) Hot meal		1.00
7.	Delhi			Pre-processed		

C:(2)/MIDDAY/TAB

standard I to X regularly attending the school are provided the "noon-meal" round the year; the coverage is 7.4 million children. In West Bengal, eighteen districts including Calcutta is covered under the programme. The number of beneficiaries is 2.62 million under the cooked meal programme and 0.22 million under the bread propgramme. In Delhi, the programme covers 0.4 million children. In Pondicherry, all children in government schools studying in classes I to VIII are eligible. The present coverage is 103 thousand.

3.8 Invariably in the states where cooked food is served part-time/voluntary workers are engaged to prepare and distribute the food. The scale of these workers is at Table 3.3.

TABLE-3.3

MID-DAY MEAL SCHEMES: STAFF AND REMUNERATION

State	Post and Remuneration		
	Organisers/ sanchalak	Cook	Helper
Tamil Nadu	1 (Rs.340)	1 (Rs.170)	1 (Rs.130)
Gujarat	1 (Rs.300)a (Rs.975)b	1 (Rs.150)a (Rs.525)b	1 (Rs.100)a (Rs.325)b

a: in rural areas
b: in urban areas

3.9 In addition to nutrition programme, some states also have programme of supply of medicines with a view to improving the health of school children. From 1994, Gujarat had begun providing three types of therapeutic medicines to supplement nutrition: alpandzol (for parasitic infections); iron and vitamin A. Tamil Nadu has a separate school health programme.

3.10 In Bihar and Karnataka, the scheme is being implemented by the Education Department. In Pondicherry, Health Department is the co-ordinating department; in Tamil Nadu the programme is implemented by the Social Welfare Department with the strong support of Mother-Teacher Council in primary schools and Parent-Teacher Association in High schools. Cooking sheds, utensils and store rooms are provided at each noon-meal centre. The Tamil Nadu Civil Supplies Corporation is vested with the responsibility of delivery to the noon-meal centre of articles supplied through public distribution system. As a prestigious programme of the State Government, monitoring and supervision are fairly intense. In Gujarat the scheme is implemented in urban areas by the Municipal

bodies and in rural areas under the supervision of the District Collector with the involvement of revenue and education officials.

3.11 In Tamil Nadu, noon-meal is provided throughout the year, in other states it is limited to the school working days. In Tamil Nadu the food provided is equivalent to about 500 - 600 calories depending on the age-group while in Gujarat it is stated to be of 450 calories.

3.12 Depending on the menu offered, there is wide variation in the cost per unit also, ranging from Re.1 in West Bengal to Rs.5.40 in Bihar. We observe that Tamil Nadu and Gujarat have been able to provide calorie input of 450-600 within a unit cost of around Re.1.50. This could be taken as a norm for unit cost.

3.13 The Rajasthan Government had expressed the view, which was also articulated by the State Education Secretary who met the Committee on May 17, 1995 that the State Government has reservations on the utility of mid-day meal programme and that the expenditure on such a programme is better invested on programmes having a direct bearing on UEE such as supply of uniforms to girls and free textbooks. While the State Government may go by what the Government of India decides it would prefer distribution of foodgrains with the freedom to the State Government to use the proceeds of the foodgrains to an educational scheme approved by the Government of India. The Committee does not share this view.

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CHAPTER IV

OPTIONS

SCOPE

4.1 Conceptually one can envisage a wide range of possibilities: at the one end is a comprehensive programme covering all children in elementary schools with provisions of not only nutritious hot mid-day meal but also universal school based health coverage. In fact, there is a respectable point of view, advocated by Dr. C. Gopalan, that to yield really durable results the Mid-Day Meal Programme has to go hand in hand with, and be an integral part of a well-organised School Health Service. As per his assessment at least 30 per cent of children in rural schools at any given point of time are suffering from chronic or acute infections such as obitis media, sore throat, and rheumatic heart diseases. In the face of such infactions, school meals cannot make as significant an impact on health and nutritious status as they otherwise would. It is only if school meal is part of a school health service that the impact would be gratifying. To quote Dr. C. Gopalan (1981):

> *The midday meal Programme in schools, which generated a great deal of enthusiasm some years ago, has also by and large, proved to be no shining success, apart from a few exceptions. Some recent evaluation studies have indicated positive benefits of midday meal programme but, by and large, the results in other situations have not been apparently convincing enough to generate continuing enthusiasm. The reason for this again has been that midday meal programmes have been conceived of and implemented as isolated programmes, without any serious attempt to integrate them as an element of comprehensive school health service.*
>
> *Many midday meal programmes were undertaken merely because free foreign food doles were available; and it was the mechanics of the feeding operation and the disposal of the food that claimed the main attention. A school lunch programme in a school which has no access to safe water supply, and in which a high proportion of children suffer from chronic infections like septic tonsils or middle-ear disease, cannot be expected to work wonders. Indeed it will be a waste of precious resources. On the other hand, a purposeful and well monitored midday meal programme adapted to suit the local needs, based on locally available food ingredients, integrated with a school health programme and used as a means of nutrition education of the 'school community' can prove rewarding.*
>
> ***Therapeutic programme:*** *Indeed, where resources are limited, a midday meal programme, instead of being conducted as a blanket welfare operation, can even be undertaken as a 'therapeutic' programme, specifically directed to school children identified in the course of medical inspection as suffering from*

moderate or severe malnutrition, and limited in each case to the duration considered necessary on medical grounds and till the family can be educated and persuaded to improve the child's diet; such a programme may be based on ready-to-eat nutritious snacks prepared in village cooperatives from locally available foods.

In some situations, in rural areas such dietary supplementation may be found necessary only in certain seasons of the year - such as the preharvest season when there is widespread under-employment among parents and acute poverty. There is a case of modifying and restructuring our school lunch programmes on these and other lines but not for totally abandoning them.

4.2 Less comprehensive in scope is the supply of hot mid-day meal programme with more limited health coverage by way of supply of vitamins, iron, etc. As one proceeds down the continuum there are options like supply of hot cooked food sans health coverage, of pre-cooked food, and of food grains.

4.3 Ideally the more comprehensive the programme, the better it is; choice, however, is constrained by the availability of resources, financial as well as organisational. Organisational requirements are likely to be more exacting than financial resources; therefore phasing and gradual step up of the programme are warranted by the criteria of sustainability and cost-effectiveness. It would be necessary to provide for variations among states; states which have been implementing nutrition support to education with a certain degree of success can move with ease to more comprehensive options while others may like to move by stages.

4.4 Whatever might be the mode of delivery of nutrition support *per se*, **we would commend strong linkages between primary education and the primary health centre network so that the basic health care needs of children are catered to. We would like nutrition support to be perceived as part of a comprehensive package bringing together health, nutrition, early childhood care and primary education.**

4.5 The synergies that can be derived by co-ordinated implementation of related programmes have been established by many studies including the Project Nutrition, Health Education and Environmental Sanitation (NHEES) conducted by NCERT in collaboration with SCERTs. The project was tried out in select blocks in fifteen states and union territories over the period 1975-89. Common micro-nutrient deficiencies, chronic or acute infections, visual and speech impediments of school children need to be identified and remedied by linkages between the school and primary health care system. We take note of the fact that many states have taken initiatives in this regard. To illustrate, the programme as implemented in Gujarat, provides for supply of medicines, vitamin A and iron; the Health Department of Tamil Nadu has mounted a strong school health programme separately. Likewise a school health project is in implementation in Andhra Pradesh with the assistance of the Overseas Development Agency, United Kingdom. A school health programme

is being tried out on a pilot basis in ten districts covered by the Uttar Pradesh Basic Education Project funded by the World Bank.

4.6 The Ministry of Human Resource Development has been attempting to promote convergence, the circulars issued by Department of Women and Child Development and by the Department of Education are at **Annexure IV**. Further, the Planning Commission has formulated guidelines and commended them to the States **(also given in Annexure IV). We would strongly commend them to the States for speedy and effective implementation for it is only through convergence that we can realise the synergies of related programmes only through convergence can the country move fast towards the goal of comprehensive child care.**

MODE OF DELIVERY OF NUTRITIONAL SUPPORT

4.7 The three basic choices are: (1) supply of hot meal, (ii) pre-cooked food and (iii) food grains. Each of these have their merits and demerits which need to be taken note of while finally deciding on the specifics of the programme.

4.8 The hot meal is likely to be the most satisfying to the rural communities and is likely to have best outcomes if the food is hygienically prepared based on sound nutritional principles and if the exacting requirements of logistics, operations and monitoring are met continuously without let or hindrance. From the nutritional angle the endeavour should be to bridge the average nutritional gap of about 600 cal. through a balanced diet of cereals, pulses, oil and vegetables. The cereal component could be of the order of 100 gms/day, or roughly, 60-70 per cent of the calorie deficit to be provided. Proposals were mooted from time to time for limited coverage to children of disadvantaged communities. However, this is not a viable option. One cannot and should not discriminate among children in the distribution of cooked food; universal provision of food to all the students can be a potent solvent of social barriers and inhibitions. If resources are a constraint, selectivity has to be introduced by restricting the number of schools to be covered; there can be additional selectivity by limiting the coverage to a few classes, say classes I-V (primary), instead of classes I-VIII (upper primary); however, **all children in the classes selected for coverage should be provided the hot cooked meal.**

4.9 But a logical consequence of this approach is that the programme does not target the poor; the question therefore arises whether there is an alternative mode of delivery which enables the resources to be directed to poor children who are likely to have lower nutritional status and whose families may require incentives to defray the associated costs of education; it is here that the 'Food for Education' makes the debut. Particularly in states with lower enrolment ratios and higher drop-out rates and which are further down on the road to UEE targetting towards poorer families has greater merit.

4.10 Pro-rata, the supply of cereal/child under Food For Education would have to be higher than the hot meal variant. It is reasonable to expect that only a part of the food grains supplied to the family would be available to the school going children;

while this is not desirable from the nutritional point of view, it has the incidental merit of being a stronger economic incentive to the family to send the child to school. Further, a higher scale of foodgrain supply is warranted by the fact that the foodgrains at 100 gm/day would cover only 60-70 per cent of the calorific gap that is proposed to be covered. Assuming that the child would receive only 50 per cent of the foodgrains supplied to the families and assuming that the foodgrain so devolving on the child would be 70 per cent of the calorific gap **a supply of foodgrains 5 kg/child to the family for ten months would be equivalent to the supply of 100 gms/day/child for 200 school days under the hot food variant. We would recommend this as the norm for the Food For Education variant.**

4.11 While the supply of hot food would be linked with the actual attendance of the child, surrogate norms would have to be devised for the Food For Education variant. **A minimum attendance of 80 per cent could be taken as the eligibility criterion.** We considered the possibility of limiting the number of children per family who could be covered under Food For Education variant so that small family norm is promoted. While such a linkage has plausible merit, it is beset with operational problems and is also inconsistent with the normative objective itself. The eligibility criterion becomes more complex; if a family has more than two children at school, eligibility would have been linked with the 80 per cent attendance of atleast two school children in the family. Not only is this cumbersome to implement this criterion may militate against the small family norm itself. Such an eligibility criterion may discriminate against female participation. There is ample empirical evidence linking low birth rates with higher level of nutrition and longer years of schooling among girls; the small family norm is therefore likely to be better served by ensuing that every child goes to school and completes the primary and upper primary cycle of eight years. Therefore, **we would suggest that no ceiling on number of children for benefits under the scheme need be prescribed.**

4.12 The choice among the two alternatives so far discussed is also linked with organisational resources required to deliver the programme. A hot mid-day meal scheme is inevitably more exacting in its requirement of organisation, logistics and monitoring. Common to both options is the essentiality of an effective public distribution system whereby adequate quantities of foodgrains regularly reach the village for distribution to the school (for the hot meal variant) or to the family (for the Food For Education variant). In addition to this common requirement, the hot food variant calls for the infrastructure and manpower to procure the provisions other than the foodgrains, store them, cook the food in hygienic conditions and serve them. Given the paramount objective of ensuring that the teaching and learning time is not curtailed and given the understandable reluctance of teachers not to be held responsible for organising the programme it would be necessary to create additional facilities and manpower. States like Gujarat and Tamil Nadu have found it necessary to appoint part-time or volunteer women like, organiser, cook and helper. However, there have been problems of unionisation and demands for regular service and comparable wages. If the programme is to operate on a large scale on a sustained basis it would be necessary to explore alternatives to creation of large cadres of part-time workers or volunteers. Many possibilities exist; they have

to be explored, e.g. the use of Non-Governmental Organisations(NGOs), DWACRA groups, linkages with ICDS and so on. The creation of facilities, effective and viable in the long run, has to be an essential condition for introduction of the hot-food variant. Large scale creation of governmental cadres, whatever be their nature, is undesirable.

4.13 With any of the variant, constant vigilance is necessary to prevent leakages and to ensure that the intended benefits reach the intended beneficiaries. Though less demanding on logistics the Food For Education variant calls for more rigorous mechanism for maintaining fidelity in the determination of entitlement. An odd spot check of attendance is not likely to be effective as entitlement is related to average attendance rather than attendance on the day of check. Hence, Food For Education is more demanding in its reliance on the local communities for preventing leakages. Therefore, with any variant Panchayat Bodies, Village Education Committees, Mother/Parent Teachers Councils, and Mahila Samakhya representatives have a crucial role in facilitating and overseeing the programme.

4.14 The uncompromising logistical demands of hot meal variant can be obviated by the delivery of pre-cooked food. Quite a few alternatives are in operation in some states, e.g., supply of bread in Calcutta, of bread/bun/fried grams in Delhi, processed food in Karnataka, etc. This option is particularly viable in urban areas with well developed chains of manufacturers and suppliers. However, it is a moot point how far this is a viable option in remote areas where the continuous supply, of processed food may not be viable and may not necessarily suit the tastes of children. Further the cost/calorie is likely to be higher as the value added in manufacture would be higher than the cost of conventional cooking and has to be provided for.

4.15 Thus, to sum up, each variant has its merits and demerits; the adaptability is contextual. **As organisational arrangements fall in place, and resources expand it may be possible to move toward universal coverage of all school children with hot meal or a combination of hot meal and processed food. In the interim, it would be desirable to provide flexibility to the state governments giving them an option to choose among the variants or opt for a combination of variants. It is conceivable that in the same state, in the metropolitan areas pre-cooked food is supplied, hot food in blocks where favourable conditions can be created and food for education elsewhere. However, from the operational point of view only one mode of delivery should be chosen for all the schools in a block and the choice should not vary during the year.**

SELECTIVITY BY STAGE OF ELEMENTARY EDUCATION

4.16 In the face of resources and operational requirement constraints, an additional dimension of selectivity is provided by stages of elementary education, viz., primary and upper primary education. In most states there are schools which exclusively impart primary education. It should, however, be noted that the number of years covered by primary education varies - it could be 4 or 5 years. Therefore, it is possible to have the programme limited to primary schools; even coverage of primary classes within an upper primary school through a hot food is not as

invidious a discrimination as limiting the coverage in a given class. However, **from the point of view of UEE, coverage of upper primary classes is essential;** gross enrolment ratios are considerably lower and drop-out rates higher at the upper primary stage; it is enhanced participation at the upper primary stage that would determine the time by when elementary education is universalised. Given our objective to accelerate these trends coverage of upper primary classes has great educational merit. Considering that infrastructure would be in place, extention of coverage to upper primary classes should pose no extra effort. **We would, however, suggest that** from operational point of view **nutrition support to education be extented to all government, local body and aided schools which** account for more than 96 per cent of primary schools in the country. We do not commend coverage of other schools as most of them are either unrecognised or high fee charging schools catering to the better off families. Coverage of unrecognised schools may generate litigation as management of such schools may contend that coverage tantamounts to recognition by State Government.

UNIVERSAL COVERAGE

4.17 In order to estimate the foodgrain requirements to cover all children in elementary schools the following assumptions have been made:

(i) Supply of nutritional support would be:

either of provisions of hot meal, of which the foodgrains component would be 100 grams a day for 200 school days;

or the equivalent supply of 5 kgs of wheat/rice per month per child to family, for 10 months.

(ii) It is assumed that 30 per cent of the school children belong to poor families.

(iii)The data on enrolment is drawn from **Selected Educational Statistics, 1993-94.**

The state-wise requirements of food grains so calculated are furnished in Table 4.1. Average attendance is likely to be less than the enrolment figures. Therefore the food grain requirements for the hot meal variant have been estimated assuming an average attendance of eighty per cent. These estimates are also provided in Table 4.1. The all India estimates are summarised in Table 4.2.

TABLE 4.1: FOOD GRAIN REQUIREMENTS FOR UNIVERSAL COVERAGE (1993-94)

S. NO.	STATE	SCHOOL ENROLMENT[1] I-V	VI-VIII	I-VIII	HOT MEAL - I FOOD IN TONNES I-V	I-VIII	HOT MEAL - II FOOD IN TONNES I-V	I-VIII	NO. OF POOR CHILDREN I-V	I-VIII	FOOD FOR EDUCATION FOOD GRAIN REQT IN TONNES I-V	I-VIII
1	2	3	4	5	6	7	8	9	10	11	12	
1	ANDHRA PRADESH	8510000	2759000	11269000	170200	225380	136160	180304	2836667	3756333	141833	187817
2	ARUNACHAL PRADESH	130421	33653	164074	2608	3281	2087	2625	43474	54691	2174	2735
3	ASSAM	3751895	1266686	5018581	75038	100372	60030	80297	1250632	1672860	62532	83643
4	BIHAR	8899740	2220719	11120459	177995	222409	142396	177927	2966580	3706820	148329	185341
5	GOA	132372	77952	210324	2647	4206	2118	3365	44124	70108	2206	3505
6	GUJARAT	5982918	1995231	7978149	119658	159563	95727	127650	1994306	2659383	99715	132969
7	HARYANA	2283000	863000	3146000	45660	62920	36528	50336	761000	1048667	38050	52433
8	HIMACHAL PRADESH	712480	391400	1103880	14250	22078	11400	17662	237493	367960	11875	18398
9	JAMMU & KASHMIR	799453	331507	1130960	15989	22619	12791	18095	266484	376987	13324	18849
10	KARNATAKA	6119658	1937308	8056966	122393	161139	97915	128911	2039886	2685655	101994	134283
11	KERALA	3019185	1906699	4925884	60384	98518	48307	78814	1006395	1641961	50320	82098
12	MADHYA PRADESH	9040000	3203000	12243000	180800	244860	144640	195888	3013333	4081000	150667	204050
13	MAHARASHTRA	10957219	4202253	15159472	219144	303189	175316	242552	3652406	5053157	182620	252658
14	MANIPUR	241500	98400	339900	4830	6798	3864	5438	80500	113300	4025	5665
15	MEGHALAYA	175654	54791	230445	3513	4609	2810	3687	58551	76815	2928	3841
16	MIZORAM	115669	56797	172466	2313	3449	1851	2759	38556	57489	1928	2874
17	NAGALAND	158100	61965	220065	3162	4401	2530	3521	52700	73355	2635	3668
18	ORISSA	3842000	1259000	5101000	76840	102020	61472	81616	1280667	1700333	64033	85017
19	PUNJAB	2066734	910712	2977446	41335	59549	33068	47639	688911	992482	34446	49624
20	RAJASTHAN	5458000	1804000	7262000	109160	145240	87328	116192	1819333	2420667	90967	121033
21	SIKKIM	75153	20760	95913	1503	1918	1202	1535	25051	31971	1253	1599
22	TAMIL NADU	8020950	3534786	11555736	160419	231115	128335	184892	2673650	3851912	133683	192596
23	TRIPURA	400079	141231	541310	8002	10826	6401	8661	133360	180437	6668	9022
24	UTTAR PRADESH	15984718	5527408	21512126	319694	430243	255755	344194	5328239	7170709	266412	358535
25	WEST BENGAL	10117000	4603000	14720000	202340	294400	161872	235520	3372333	4906667	168617	245333
26	A&N ISLANDS	44311	19182	63493	886	1270	709	1016	14770	21164	739	1058
27	CHANDIGARH	59235	32749	91984	1185	1840	948	1472	19745	30661	987	1533
28	D & N HAVELI	18690	4802	23492	374	470	299	376	6230	7831	312	392
29	DAMAN & DIU	12892	6679	19571	258	391	206	313	4297	6524	215	326
30	DELHI	957092	525413	1482505	19142	29650	15313	23720	319031	494168	15952	24708
31	LAKSHADWEEP	8773	3673	12446	175	249	140	199	2924	4149	146	207
32	PONDICHERRY	105648	60020	165668	2113	3329	1690	2664	35216	55491	1761	2775
	TOTAL	108200539	39914582	148115121	2164011	2962302	1731209	2369842	36066846	49371707	1803342	2468585

NOTE:

(i) AS OF 1.3.1994 (SOURCE: SELECTED EDUCATIONAL STATISTICS 1993-94)
(ii) HOT MEAL - I: ESTIMATES BASED ON ENROLMENT
(iii) HOT MEAL - II: ESTIMATES BASED ON AVERAGE ATTENDANCE AT 80 PER CENT ENROLMENT

TABLE - 4.2
FOOD GRAIN REQUIREMENTS FOR UNIVERSAL COVERAGE(1993-94)

(In million tonnes)

	Hot Food-I	Hot Food-II	Food for Edn.
Classes I-V	2.16	1.73	1.80
Classes I-VIII	2.96	2.37	2.47

4.18 It is reasonable to expect that the nutritional support would attract the out-of-school children to the school system; the food grains requirement of nutritional support have been estimated for the years upto 2001 assuming that all out-of-school children would join the classes I-V over a three year period and classes VI-VIII over a five year period (Table 4.3). These estimates take into account the age-specific population of children (age-groups 6-11 and 11-14) projected by the Registrar General, Census and the following assumptions:

(i) Classes I-VIII have children younger than six years or older than fourteen years. Therefore the enrolment in class I-VIII is likely to be larger than the age specific population of children. The enrolment has been derived from age-specific population using the gross enrolment ratios (Classes I-V and Classes I-VIII) for the year 1993-94. The school going population is assumed to be 117 per cent of the 6-14 age population; 17 per cent is the universal correction applied to derive net enrolment from gross enrolment.

(ii) Out-of-School children is placed at 11 million in classes I-V and 17 million in classes I-VIII.

SELECTIVITY: AREA APPROACH

4.19 As it is unlikely that universal coverage can be attempted rightaway the programme has to be selective to begin with. In choosing the areas where the programme can be started three criteria came up for consideration:

(i) The Employment Assurance Scheme (EAS) Blocks. These are backward areas where it was found necessary to provide assured purchasing power through employment schemes; they are situated in mainly drought prone areas, desert areas, flood prone areas, tribal

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TABLE 4.3: FOOD GRAIN REQUIREMENTS FOR UNIVERSAL COVERAGE (UPTO 2001)

S. NO	YEAR	SCHOOL ENROLMENT I-V	SCHOOL ENROLMENT I-VIII	HOT MEAL - I FOOD IN TONNES I-V	HOT MEAL - I FOOD IN TONNES I-VIII	HOT MEAL - II FOOD IN TONNES I-V	HOT MEAL - II FOOD IN TONNES I-VIII	NO. OF POOR CHILDREN I-V	NO. OF POOR CHILDREN I-VIII	FOOD FOR EDUCATION FOOD GRAIN REQT IN TONNES I-V	FOOD FOR EDUCATION FOOD GRAIN REQT IN TONNES I-VIII
	1	2	3	4	5	6	7	8	9	10	11
1	1993	108200539	148115121	2164011	2962302	1731209	2369842	36066846	49371707	1803342	2468585
2	1994*	111564000	156266000	2231280	3125320	1785024	2500256	37188000	52088667	1859400	2604433
3	1995*	115033000	165098000	2300660	3301960	1840528	2641568	38344333	55032667	1917217	2751633
4	1996*	118610000	174681000	2372200	3493620	1897760	2794896	39536667	58227000	1976833	2911350
5	1997*	118882000	181679000	2377640	3633580	1902112	2906864	39627333	60559667	1981367	3027983
6	1998*	119155000	189485000	2383100	3789700	1906480	3031760	39718333	63161667	1985917	3158083
7	1999*	119429000	190071000	2388580	3801420	1910864	3041136	39809667	63357000	1990483	3167850
8	2000*	119703000	190659000	2394060	3813180	1915248	3050544	39901000	63553000	1995050	3177650
9	2001*	119977000	191248000	2399540	3824960	1919632	3059968	39992333	63749333	1999617	3187467

NOTE:

* PROJECTIONS

(i) HOT MEAL - I: ESTIMATES BASED ON ENROLMENT

(ii) HOT MEAL - II: ESTIMATES BASED ON AVERAGE ATTENDANCE AT 80 PER CENT ENROLMENT

areas, hilly areas, etc. The Revised Public Distribution System (RPDS) also covers these blocks.

(ii) Blocks with low female literacy rates (LFL), i.e., female literacy rate lower than the national female literacy rate of 39.29 per cent.

(iii) ICDS Blocks. These are in (a) areas predominantly inhabited by tribes, (b) areas inhabited predominantly by scheduled castes, (c) drought prone areas, (d) urban slums, (e) blocks covered by Desert Development Programme, (f) blocks covered by Hill Area Development Programme, (g) blocks in the districts having concentration of educationally backward minorities and (h) areas prone to floods.

4.20 The delivery of food grains at the village level is critical to the success of the programme. EAS blocks are congruent with the RPDS blocks; therefore special efforts being made by Central and State Governments to improve food distribution in these economically backward districts and food deficit blocks would, mutatis mutandis facilitate the implementation of nutrition support to elementary education. Conversely, the creation of an assured demand for food grains by nutrition support programme would buttress the RPDS. In view of this symbiotic relationship, we have taken EAS/RPDS as the basic criterion on which LFL, ICDS, etc., can be superimposed.

4.21 The requirements of food grains were estimated for both variants - Hot cooked food and Food For Education with four alternative criteria for selection of blocks. These criteria are:

(i) Blocks covered by Employment Assurance Scheme (EAS)

(ii) Blocks with low female literacy rates (LFL)

(iii) Blocks with low female literacy rates and are also covered by Employment Assurance Scheme (EAS LFL)

(iv) ICDS blocks which are low female literacy blocks and which are not covered by Employment Assurance Scheme. (non-EAS/ICDS-LFL)

4.22 Of the 5241 blocks in the country, 2368 are EAS blocks (Table 4.4); Of the 2102 blocks with SC population of 20 per cent and above 532 are EAS blocks; likewise of the 1172 blocks with ST population of 20 per cent and above 995 are EAS blocks; of the 3108 ICDS blocks 1575 are EAS blocks.

4.23 Of the 5241 blocks in the country, 3791 are LFL blocks, i.e., have female literacy rate lower than the national female literacy rate of 39.29 per cent. Of the 2102 blocks with SC population of 20 per cent and above 1580 are LFL blocks; likewise of the 995 blocks with ST population of 20 per cent and above 975 are LFL blocks.

TABLE 4.4 : BLOCKS WITH EAS AND FEMALE LITERACY LESS THAN NATIONAL AVERAGE (39.29%)

S. NO.	STATE	NO. OF DISTRICTS						NO. OF BLOCKS						POPULATION				
		TOTAL	EAS	LFL	EAS LFL	NON-EAS ICDS LFL BLOCKS	% of Col.5 to Col.2	TOTAL	EAS BLOCKS	LFL BLOCKS	EAS LFL BLOCKS	NON-EAS ICDS LFL BLOCKS	% of Col.11 to Col.8	TOTAL	EAS BLOCKS	LFL BLOCKS	EAS LFL BLOCKS	NON-EAS ICDS LFL BLOCKS
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	ANDHRA PRADESH	23	18	22	15	18	65.22	330	155	386	128	50	38.79	66508000	31238606	62918462	25797042	2602788
2	ARUNACHAL PRADESH	12	11	11	10	0	83.33	54	48	42	42	0	77.78	865000	864558	640576	640576	0
3	ASSAM	23	15	20	12	8	52.17	206	69	67	38	12	18.45	22414000	9289586	9850672	5221076	1824366
4	BIHAR	50	34	42	24	29	48.00	591	266	567	248	133	41.96	86374000	34086275	78370356	28504708	21210793
5	GOA	2	0	0		0	0.00	11	0	0	0	0	0.00	1170000		0	0	0
6	GUJARAT	19	17	18	17	4	89.47	218	132	63	56	4	25.69	41310000	24177642	11238561	9662784	777536
7	HARYANA	16	6	16	6	9	37.50	108	44	81	35	35	32.41	16464000	4859040	8850003	3817098	4171366
8	HIMACHAL PRADESH	12	6	8	3	6	25.00	69	18	22	6	11	8.70	5171000	1051819	1263307	220701	720270
9	JAMMU & KASHMIR	14	13	13	13	8	92.86	119	80	119	80	0	67.23	7719000	5189244	5189244	5189244	0
10	KARNATAKA	20	16	15	13	12	65.00	175	119	110	79	29	45.14	44977000	22102187	23491918	14601247	5478558
11	KERALA	14	7	0		0	0.00	152	21	0	0	0	0.00	29098000	6595707	0	0	11626164
12	MADHYA PRADESH	45	37	45	12	28	26.67	439	297	417	289	89	62.96	66181000	29740787	50209533	29083524	[illegible]
13	MAHARASHTRA	31	25	24	21	13	67.74	298	173	115	86	24	28.86	78937000	28104488	19874470	14310385	[illegible]
14	MANIPUR	8	5	7	6	2	75.00	31	22	13	10	3	32.26	1837000	641484	501046	253285	0
15	MEGHALAYA	7	5	5	5	0	71.43	32	32	18	18	0	56.25	1775000	1444731	852533	852533	0
16	MIZORAM	3	3	2	2	0	66.67	20	20	2	2	0	10.00	690000	371810	46967	46967	0
17	NAGALAND	7	7	2	2	0	28.57	28	28	6	6	0	21.43	1209000	1010119	201507	201507	3871369
18	ORISSA	30	18	13	11	8	36.67	314	175	236	153	46	48.73	31660000	11253603	17850803	10773151	2322212
19	PUNJAB	14	0	6	0	5	0.00	118	0	40	0	17	0.00	20282000		5325309	0	5780465
20	RAJASTHAN	30	29	27	21	10	70.00	237	172	237	172	41	72.57	44006000	25815558	34287025	25815558	0
21	SIKKIM	4	4	3	0	0	0.00	4	4	4	4	0	100.00	406000	406000	138509	138509	10167357
22	TAMIL NADU	22	14	16	9	13	40.91	387	89	162	38	99	9.82	55859000	8529635	16475925	3779721	0
23	TRIPURA	3	3	3	2	0	66.67	18	18	5	5	0	27.78	2757000	2445674	565700	565700	49996023
24	UTTAR PRADESH	63	37	63	34	53	53.97	897	248	871	198	374	22.07	139112000	24214483	109126837	22227735	12317342
25	WEST BENGAL	17	13	14	11	11	64.71	341	129	185	91	73	26.69	68078000	16920866	27973684	12488883	0
26	A&N ISLANDS	2	1	0		0		5	2	0	0	0	0.00	281000	39208	0	0	0
27	CHANDIGARH	1	0	0		0		0	0	0	0	0		642000		0	0	0
28	D & N HAVELI	1	1	1		0		1	1	1	1	0	100.00	138000	138000	138477	138477	0
29	DAMAN & DIU	2	1	1		0		2	1	1	1	0	50.00	102000	18847	18847	18847	0
30	DELHI	1	0	0		0		5	0	0	0	0	0.00	9421000		0	0	0
31	LAKSHADWEEP	1	1	0		0		5	5	0	0	0	0.00	52000	35631	0	0	0
32	PONDICHERRY	1	0	0		0		6	0	0	0	0	0.00	808000		0	0	0
	TOTAL	498	347	397	249	229	50.00	5241	2368	3791	1786	1040	34.08	846303000	290585588	482400291	214355258	137715334

C:(6)/LOTUS/EAS6.WK1

Legends:

EAS : Employment Assurance Scheme
LFL : Low Female literacy
ICDS: Intregrated Child Development Scheme

NOTE:

4.24 Of the 5241 blocks in the country, 1786 are EAS - LFL blocks, i.e., EAS blocks that have female literacy rate lower than the national female literacy rate of 39.29 per cent. Of the 2102 blocks with SC population of 20 per cent and above 438 are EAS - LFL blocks; likewise of the 995 blocks with ST population of 20 per cent and above 817 are EAS - LFL blocks.

4.25 Of the 5241 blocks in the country, 1040 are ICDS blocks which are not covered by EAS and which have low female literacy (Non-EAS/ICDS LFL). Of the 2102 blocks with SC population of 20 per cent and above 658 are Non-EAS/ICDS LFL blocks; likewise of the 995 blocks with ST population of 20 per cent and above 32 are Non-EAS/ICDS LFL blocks.

4.26 It would be seen that the coverage would be smaller if the twin criteria of a block being an EAS block as well as LFL block are chosen. Correspondingly the coverage would be the largest if the single criterion of the block being LFL is used. **At the minimum, EAS-LFL blocks could be chosen as the entry point for the programme.** A larger coverage can be secured by covering all EAS blocks or in addition to EAS blocks all ICDS blocks not covered by EAS but are low female literacy blocks.

4.27 If the criterion of LFL or EAS - LFL is used certain states and union territories are left out e.g., Goa, Kerala, Punjab, Andaman & Nicobar Islands, Chandigarh, Lakshadweep and Pondicherry with EAS - LFL criterion; Goa, Punjab, Chandigarh, Delhi and Pondicherry with EAS criterion. In order to cover all states and union territories, **we would suggest that at least 10 per cent of the blocks in a state or union territory may be covered in a state or a union territory which is excluded by the criterion selected.**

4.28 Likewise, if the criteria of EAS-LFL is adopted, it is possible that in districts where DPEP is under implementation not all blocks would be covered. DPEP is a holistic programme which seeks to accelerate universalisation in the districts selected. It is, therefore, desirable that all the blocks in the DPEP districts are covered by nutritional support so that objectives of the programme are fully realised. Thirty-nine of the forty-two districts where the programme is under implementation are low female literacy districts. Therefore, **we suggest that all blocks in DPEP be covered irrespective of the criterion selected for area coverage under nutritional support.**

4.29 Statewise food grain requirements are estimated for the four categories of options indicated in para 4.17 above (Tables 4.5 - 4.8). The estimates were worked out on the following basis:

(i) The 1995 population of the selected blocks were worked from the 1991 census population using the decennial growth rates in states and union territories for the decade 1981-1991. As census was not conducted in Jammu and Kashmir in 1991, for that state the 1981 population is used.

(ii) All EAS blocks in Jammu and Kashmir are assumed to have female literacy rates lower than the national average.

(iii) From the total population of the blocks, the age-specific population (6-14 years) were worked out using the statewise population of age-specific population to the total population as per 1991 Census (Table 4.9).

(iv) The school enrolment was estimated from the age specific population using the gross enrolment ratios (classes I-V; classes I-VIII) for 1993-94).

(v) The food grain requirement of hot meal variant - I was estimated from the school enrolment at 100 gms of food grains per day per student for 200 days.

(vi) In hot meal variant - II the calculations were based on the assumption that the average attendance is 80 per cent of the school enrolment.

(vii) In the food grain requirements of Food for Education variant were estimated from the school enrolment assuming that poor children are 30 per cent of the school enrolment and food grains are provided at 5 kgs/month/family for 10 months.

TABLE 4.5: FOOD GRAIN REQUIREMENTS FOR COVERAGE OF EAS BLOCKS

S. NO.	STATE	POPULATION EAS BLOCKS 1991	GEOMETRICAL GROWTH RATE	POPULATION EAS BLOCKS 1995	AGE SPEC EAS POP-1995 6-11 I-V	AGE SPEC EAS POP-1995 11-14 VI-VIII	SCHOOL ENROLMENT 6-11 I-V	SCHOOL ENROLMENT 6-14 I-VIII	HOT MEAL REQUIREMENT - I FOOD GRAINS IN TONNES I-V	HOT MEAL REQUIREMENT - I FOOD GRAINS IN TONNES I-VIII	HOT MEAL REQUIREMENT - II FOOD GRAINS IN TONNES I-V	HOT MEAL REQUIREMENT - II FOOD GRAINS IN TONNES I-VIII	NO. OF POOR CHILDREN I-V	NO. OF POOR CHILDREN I-VIII	FOOD REQMNT FOR FOOD FOR EDN I-V	FOOD REQMNT FOR FOOD FOR EDN I-VIII
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	31238606	0.02218692	34104597	3441000	2051892	3730116	5037171	74602	100743	59682	80595	1243372	1679057	62169	83953
2	ARUNACHAL PRADESH	864558	0.03252883	982659	124280	71180	143916	182709	2878	3654	2303	2923	47972	60903	2399	3045
3	ASSAM	9289586	0.01195327	9741778	1362139	843126	1770781	2425890	35416	48518	28332	38814	590260	808630	29513	40431
4	BIHAR	34086275	0.02149996	37113590	4438261	2447895	3377517	4226936	67550	84539	54040	67631	1125839	1408979	56292	70449
5	GOA		0.00783900	0	8	0	0	0	0	0	0	0	0	0	0	0
6	GUJARAT	24177642	0.01978259	26148352	2847312	1153757	3391149	4194164	67823	83883	54258	67107	1130383	1398055	56519	69903
7	HARYANA	4859040	0.02508569	5365265	654322	340766	672643	914246	13453	18285	10762	14628	224214	304749	11211	15237
8	HIMACHAL PRADESH	1051819	0.02010711	1139001	130541	74462	155474	238276	3109	4766	2488	3812	51825	79425	2591	3971
9	JAMMU & KASHMIR	5189244	0.02582757	5746475	634052	355849	563038	793272	11261	15865	9009	12692	187679	264424	9384	13221
10	KARNATAKA	22102187	0.01959548	23886189	2733988	1542675	3278851	4280790	65561	85616	52449	68493	1092684	1426930	54634	71346
11	KERALA	6595707	0.01367198	6963878	686702	394970	702496	1125114	14050	22502	11240	18002	234165	375038	11708	18752
12	MADHYA PRADESH	29740787	0.02414896	32719373	3454591	1932416	3610848	4902834	72201	98057	57761	78445	1203349	1634278	60167	81714
13	MAHARASHTRA	28104488	0.02330603	30817529	3029464	1733995	3617180	5016514	72344	100330	57875	80264	1205727	1672171	60286	83609
14	MANIPUR	641484	0.02509793	708349	90548	44558	88918	121534	1778	2431	1423	1945	29639	40511	1482	2026
15	MEGHALAYA	1444731	0.02944737	1622571	208165	118582	155707	203733	3114	4075	2491	3260	51902	67911	2595	3396
16	MIZORAM	371810	0.03529244	427143	50713	74211	68766	148543	1375	2971	1100	2377	22922	49514	1146	2476
17	NAGALAND	1010119	0.04570430	1207836	139651	85898	148449	208148	2969	4163	2375	3330	49483	69383	2474	3469
18	ORISSA	11253603	0.01882991	12125463	1283054	761662	1241996	1676144	24840	33523	19872	26818	413999	558715	20700	27936
19	PUNJAB		0.01980739	0	0	0	0	0	0	0	0	0	0	0	0	0
20	RAJASTHAN	25815558	0.02582208	28587073	3706315	1958380	3372747	4428314	67455	88566	53964	70853	1124249	1476105	56212	73805
21	SIKKIM	406000	0.02548100	448990	75823	40544	89167	113332	1783	2267	1427	1813	29722	37777	1486	1889
22	TAMIL NADU	8529635	0.01465147	9040616	909367	493710	1318582	1819204	26372	36384	21097	29107	439527	606401	21976	30320
23	TRIPURA	2445674	0.02956310	2747960	262483	36345	342015	372109	6840	7442	5472	5954	114005	124036	5700	6202
24	UTTAR PRADESH	24214483	0.02296258	26516378	3258487	1785543	2909829	3891878	58197	77838	46557	62270	969943	1297293	48497	64865
25	WEST BENGAL	16920866	0.02252170	18497487	1816774	1041926	2250984	3228310	45020	64566	36016	51653	750328	1076103	37516	53805
26	A&N ISLANDS	39208	0.04086932	46021	7754	3828	7226	10285	145	206	116	165	2409	3428	120	171
27	CHANDIGARH		0.03615890	0	0	0	0	0	0	0	0	0	0	0	0	0
28	D & N HAVELI	138000	0.02901016	154724	19550	11277	21486	26899	430	538	344	430	7162	8966	358	448
29	DAMAN & DIU	18847	0.00783900	19445	0	0	0	0	0	0	0	0	0	0	0	0
30	DELHI		0.04278711	0	0	0	0	0	0	0	0	0	0	0	0	0
31	LAKSHADWEEP	35631	0.02597735	39480	4697	2353	6647	9266	133	185	106	148	2216	3089	111	154
32	PONDICHERRY		0.02950311	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	290585588	0.02154861	316453739	35213956	19290412	36798584	49858193	735972	997164	588777	797731	12266195	16619398	613310	830970

NOTE:

(i) AS OF 1.3.1991 (SOURCE; SELECTED EDUCATIONAL STATISTICS 1990-91)

(ii) HOT MEAL - I: ESTIMATES BASED ON ENROLMENT

(iii) HOT MEAL - II: ESTIMATES BASED ON AVERAGE ATTENDANCE AT 80 PER CENT ENROLMENT

TABLE 4.6 : FOOD GRAIN REQUIREMENT FOR EAS LFL BLOCKS

S. NO.	STATE	POPULATION EAS LFL BLOCKS 1991	GEOMETRICAL GROWTH RATE	POPULATION EAS LFL BLOCKS 1995	AGE SPEC EAS LFL POP-95 6-11 I-V	11-14 VI-VIII	SCHOOL ENROLMENT 6-11 I-V	6-14 I-VIII	HOT MEAL REQUIREMENT - I FOOD GRAINS IN TONNES I-V	I-VIII	HOT MEAL REQUIREMENT - II FOOD GRAINS IN TONNES I-V	I-VIII	NO. OF POOR CHILDREN I-V	I-VIII	FOOD REQMNT FOR FOOD FOR EDN I-V	I-VIII
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1	ANDHRA PRADESH	25797042	0.022186921	28163796	2841655	1694465	3080354	4159728	61607	83195	49286	66556	1026785	1386576	61339	69329
2	ARUNACHAL PRADESH	640576	0.032528834	728081	92082	52739	106631	135375	2133	2707	1706	2166	35544	45125	1777	2256
3	ASSAM	5221076	0.011953279	5475224	765570	473867	995241	1363436	19905	27269	15924	21815	331747	454479	16587	22724
4	BIHAR	28504708	0.021499967	31036306	3711504	2047056	2824454	3534783	56489	70696	45191	56557	941485	1178261	47074	58913
5	GOA	0	0.007839009	0	0	0	0	0	0	0	0	0	0	0	0	0
6	GUJARAT	9662784	0.019782591	10450394	1137951	461108	1355299	1676230	27106	33525	21685	26820	451766	558743	22588	27937
7	HARYANA	3817098	0.025085698	4214771	514013	267694	528405	718201	10568	14364	8454	11491	176135	239400	8807	11970
8	HIMACHAL PRADESH	226701	0.020107112	245492	28136	16049	33510	51356	670	1027	536	822	11170	17119	558	856
9	JAMMU & KASHMIR	5189244	0.025827571	5746475	634052	355849	563038	793272	11261	15865	9009	12692	187679	264424	9384	13221
10	KARNATAKA	14001247	0.017333407	15772003	1806139	1010130	2165561	2827995	43311	56560	34649	45248	721854	942665	36093	47133
11	KERALA	0	0.013671980	0	0	0	0	0	0	0	0	0	0	0	0	0
12	MADHYA PRADESH	29083524	0.024148963	31996284	3378246	1889710	3530267	4794483	70605	95890	56484	76712	1176756	1598161	58838	79908
13	MAHARASHTRA	14310385	0.023306032	15691825	1542558	882924	1841814	2554334	36836	51087	29469	40869	613938	851445	30697	42572
14	MANIPUR	253285	0.025097937	279686	35752	17593	35109	47987	702	960	562	768	11703	15996	585	800
15	MEGHALAYA	852533	0.029447371	957476	122838	69975	91883	120223	1838	2404	1470	1924	30628	40074	1531	2004
16	MIZORAM	46967	0.035292444	53957	6406	9374	8687	18764	174	375	139	300	2896	6255	145	313
17	NAGALAND	201507	0.045704305	240949	27859	17136	29614	41523	593	830	474	664	9871	13841	494	692
18	ORISSA	10773151	0.018829914	11607789	1228276	729144	1188972	1604584	23779	32092	19024	25673	396324	534861	19816	26743
19	PUNJAB	0	0.019807393	0	0	0	0	0	0	0	0	0	0	0	0	0
20	RAJASTHAN	25815558	0.025822080	28587073	3706315	1958380	3372747	4428314	67455	88566	53964	70853	1124249	1476105	56212	73805
21	SIKKIM	138509	0.025481007	153175	25867	13832	30420	38664	608	773	487	619	10140	12888	507	644
22	TAMIL NADU	3779721	0.014651472	4006151	402966	218777	584301	806141	11686	16123	9349	12898	194767	268714	9738	13436
23	TRIPURA	565700	0.029563103	635621	60714	8407	79110	86071	1582	1721	1266	1377	26370	28690	1319	1435
24	UTTAR PRADESH	22227735	0.022962581	24340764	2991135	1639043	2671084	3572557	53422	71451	42737	57161	890361	1190852	44518	59543
25	WEST BENGAL	12488883	0.022521708	13652549	1340917	769020	1661397	2382738	33228	47655	26582	38124	553799	794246	27690	39712
26	A&N ISLANDS	0	0.040869327	0	0	0	0	0	0	0	0	0	0	0	0	0
27	CHANDIGARH	0	0.036158907	0	0	0	0	0	0	0	0	0	0	0	0	0
28	D & N HAVELI	138477	0.029010168	155259	19618	11316	21560	26992	431	540	345	432	7187	8997	359	450
29	DAMAN & DIU	18847	0.007839009	19445	0	0	0	0	0	0	0	0	0	0	0	0
30	DELHI	0	0.042787118	0	0	0	0	0	0	0	0	0	0	0	0	0
31	LAKSHADWEEP	0	0.025977354	0	0	0	0	0	0	0	0	0	0	0	0	0
32	PONDICHERRY	0	0.029503113	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	209166014	0.021548616	227786133	26257976	14471504	27439585	37236793	548792	744736	439033	595789	9146528	12412264	457326	620613

NOTE:

(i) HOT MEAL - I: ESTIMATES BASED ON ENROLMENT

(ii) HOT MEAL - II: ESTIMATES BASED ON AVERAGE ATTENDANCE AT 80 PER CENT ENROLMENT

TABLE 4.7 : FOOD GRAIN REQUIREMENT FOR COVERAGE OF LPG BLOCKS

S. NO.	STATE	POPULATION LPL BLOCKS 1991	GEOMETRIC GROWTH RATE	POPULATION LPL BLOCKS 1995	AGE SPEC LPL POP-95 6-11 I-V	11-14 VI-VIII	SCHOOL ENROLMENT 6-11 I-V	6-14 I-VIII	HOT MEAL REQUIREMENT - I FOOD GRAINS IN TONNES I-V	I-VIII	HOT MEAL REQUIREMENT - II FOOD GRAINS IN TONNES I-V	I-VIII	NO. OF POOR CHILDREN I-V	I-VIII	FOOD REQMNT FOR FOOD FOR EDN I-V	I-VIII
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	62918482	0.022186921	68690949	6930741	4132768	7512923	10145496	150258	202910	120207	162328	2504308	3381837	125215	169092
2	ARUNACHAL PRADESH	640576	0.032528834	728081	92082	52739	106631	135375	2133	2707	1706	2166	35584	85125	1777	2256
3	ASSAM	9850672	0.011953279	10330176	1444412	894050	1877721	2572412	37555	51448	30044	41159	625912	857471	31296	42874
4	BIHAR	78370356	0.021499967	85330688	10204345	5628141	7765511	9718471	155310	194369	124248	155496	2588507	3239490	129425	161975
5	GOA	0	0.007839009	0	0	0	0	0	0	0	0	0	0	0	0	0
6	GUJARAT	11238561	0.019782591	12154613	1323524	536304	1576317	1949585	31526	38992	25221	31193	525439	649862	26272	32493
7	HARYANA	8850003	0.025085698	9772015	1191747	620654	1225116	1665160	24502	33303	19602	26643	408372	555053	20419	27753
8	HIMACHAL PRADESH	1263307	0.020107112	1368019	156789	89433	186735	286185	3735	5724	2988	4579	62265	95395	3113	4770
9	JAMMU & KASHMIR	5189244	0.025827571	5746475	634052	355849	563038	793272	11261	15865	9009	12692	187679	264424	9384	13221
10	KARNATAKA	20491918	0.019595487	22145946	2534801	1430282	3035227	3968910	60705	79378	48628	63503	1013078	1322970	50654	66149
11	KERALA	0	0.013671980	0	0	0	0	0	0	0	0	0	0	0	0	0
12	MADHYA PRADESH	50209533	0.024148963	55238096	5832173	3262378	6094620	8277152	121892	165543	97514	132434	2031580	2759051	101577	137953
13	MAHARASHTRA	19874470	0.023306032	21793034	2142327	1226218	2557938	3547496	51159	70950	40927	56760	852646	1182499	42632	59125
14	MANIPUR	501046	0.025097937	553272	70725	34803	69451	94927	1389	1899	1111	1519	23150	31642	1158	1583
15	MEGHALAYA	852533	0.029447371	957476	122838	69975	91883	120223	1838	2404	1470	1924	30628	40074	1531	2004
16	MIZORAM	46967	0.035292444	53957	6406	9374	4587	16764	174	335	139	300	2896	6705	145	335
17	NAGALAND	201597	0.045704305	240949	27859	17136	29614	41523	592	830	474	664	9871	13841	494	692
18	ORISSA	17850803	0.018829914	19233774	2035219	1208171	1970092	2658749	39402	53175	31521	42540	656997	886330	32835	44317
19	PUNJAB	5325309	0.019807393	5759933	599679	339375	543309	773406	10866	15468	8693	12374	181103	257802	9055	12890
20	RAJASTHAN	34287025	0.025822080	37968022	4922556	2601029	4479526	5991481	89591	119770	71673	95816	1493436	1996494	74672	99825
21	SIKKIM	130509	0.025401007	143173	23007	13032	30429	38664	608	773	487	619	10140	12888	507	644
22	TAMIL NADU	16475925	0.014651472	17462940	1756542	953656	2546986	3513992	50940	70280	40752	56224	848995	1171331	42450	58567
23	TRIPURA	565700	0.029563103	635621	60714	8407	79110	86071	1582	1721	1266	1377	26378	28690	1319	1435
24	UTTAR PRADESH	109126837	0.022962581	119500730	14684946	8046866	13113657	17539433	262273	350789	209819	280631	4371219	5846478	218561	292324
25	WEST BENGAL	27973684	0.022521708	30580164	3003503	1722518	3721340	5337062	74427	106741	59541	85393	1240447	1779021	62022	88951
26	A&N ISLANDS	0	0.040869327	0	0	0	0	0	0	0	0	0	0	0	0	0
27	CHANDIGARH	0	0.036158907	0	0	0	0	0	0	0	0	0	0	0	0	0
28	D & N HAVELI	138477	0.029010168	155259	19618	11316	21560	26992	431	540	345	432	7187	8997	359	450
29	DAMAN & DIU	18847		19445	0	0	0	0	0	0	0	0	0	0	0	0
30	DELHI	0	0.042787118	0	0	0	0	0	0	0	0	0	0	0	0	0
31	LAKSHADWEEP	0	0.035977354	0	0	0	0	0	0	0	0	0	0	0	0	0
32	PONDICHERRY	0	0.029503113	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	477211047	0.021548616	519692739	59193266	32766261	61856963	84039722	1337139	1680794	989711	1344636	20518988	28013241	1030949	1400662

NOTE:

(i) HOT MEAL - I: ESTIMATES BASED ON ENROLMENT

(ii) HOT MEAL - II: ESTIMATES BASED ON AVERAGE ATTENDANCE AT 80 PER CENT ENROLMENT

TABLE 4.8 : FOOD GRAIN REQUIREMENT FOR COVERAGE OF NON-EAS ICDS LPL BLOCKS

S. NO.	STATE	POPULATION NON-EAS ICDS LPL 1991	GEOMETRIC GROWTH RATE	POPULATION NON-EAS ICDS LPL 1995	AGE SPEC LPL POP-95 6-11 I-V	11-14 VI-VIII	SCHOOL ENROLMENT 6-11 I-V	6-14 I-VIII	HOT MEAL REQUIREMENT - I FOOD GRAINS IN TONNES I-V	I-VIII	HOT MEAL REQUIREMENT - II FOOD GRAINS IN TONNES I-V	I-VIII	NO. OF POOR CHILDREN I-V	I-VIII	FOOD REQMNT FOR FOOD FOR EDN I-V	I-VIII
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	2602288	0.022186921	2841035	286653	170930	310732	419614	6215	8392	4972	6714	103577	139871	5179	6994
2	ARUNACHAL PRADESH	0	0.032528834	0	0	0	0	0	0	0	0	0	0	0	0	0
3	ASSAM	1824366	0.011953279	1913171	267508	165580	347761	476416	6955	9528	5564	7623	115920	158805	5796	7940
4	BIHAR	21210793	0.021777707	23094594	2761787	1523246	2101720	2630286	42034	52606	33628	42085	700573	876762	35029	43838
5	GOA	0	0.007839009	0	0	0	0	0	0	0	0	0	0	0	0	0
6	GUJARAT	777536	0.019782591	840913	91568	37104	109057	134881	2181	2698	1745	2158	36352	44960	1818	2248
7	HARYANA	4171366	0.025085698	4605948	561719	292539	577447	784857	11549	15697	9239	12558	192482	261619	9624	13081
8	HIMACHAL PRADESH	720270	0.020107112	779971	89393	50990	106467	163168	2129	3263	1703	2611	35489	54389	1774	2719
9	JAMMU & KASHMIR	0	0.025827571	0	0	0	0	0	0	0	0	0	0	0	0	0
10	KARNATAKA	5478558	0.019599487	5920766	877003	502307	812544	1061937	16251	21233	13001	16978	270848	353699	13542	17685
11	KERALA	0	0.013671980	0	0	0	0	0	0	0	0	0	0	0	0	0
12	MADHYA PRADESH	11626104	0.024148963	12790476	1350450	755409	1411220	1916589	28224	38332	22580	30665	470407	638863	23520	31943
13	MAHARASHTRA	4601522	0.023306032	5045726	496011	283905	592238	821349	11845	16427	9476	13142	197413	273783	9871	13689
14	MANIPUR	247761	0.025097937	273586	34972	17210	34343	46940	687	939	549	751	11448	15647	572	782
15	MEGHALAYA	0	0.029447371	0	0	0	0	0	0	0	0	0	0	0	0	0
16	MIZORAM	0	0.035292444	0	0	0	0	0	0	0	0	0	0	0	0	0
17	NAGALAND	0	0.045704305	0	0	0	0	0	0	0	0	0	0	0	0	0
18	ORISSA **	3871369	0.018829914	4171299	441385	262020	427261	576613	8545	11532	6836	9226	142420	192204	7121	9610
19	PUNJAB	2322212	0.019807393	2511739	261503	147991	236921	337260	4738	6745	3791	5396	78974	112420	3949	5621
20	RAJASTHAN **	5780465	0.025822080	6401046	829896	438509	755205	991562	15104	19831	12083	15865	251735	330521	12587	16526
21	SIKKIM	0	0.025481007	0	0	0	0	0	0	0	0	0	0	0	0	0
22	TAMIL NADU	10167357	0.014651472	10776448	1083969	588505	1571755	2168498	31435	43370	25148	34696	523918	722833	26196	36142
23	TRIPURA	0	0.029563103	0	0	0	0	0	0	0	0	0	0	0	0	0
24	UTTAR PRADESH	49996025	0.022962581	54748783	6727850	3686639	6007970	8035621	120159	160712	96128	128570	2002657	2678540	100133	133927
25	WEST BENGAL	12317342	0.022521708	13465024	1322499	758457	1638577	2350089	32772	47000	26217	37600	546192	783336	27310	39167
26	A&N ISLANDS	0	0.040869327	0	0	0	0	0	0	0	0	0	0	0	0	0
27	CHANDIGARH	0	0.036158907	0	0	0	0	0	0	0	0	0	0	0	0	0
28	D & N HAVELI	0	0.029010168	0	0	0	0	0	0	0	0	0	0	0	0	0
29	DAMAN & DIU	0		0	0	0	0	0	0	0	0	0	0	0	0	0
30	DELHI	0	0.042787118	0	0	0	0	0	0	0	0	0	0	0	0	0
31	LAKSHADWEEP	0	0.025977354	0	0	0	0	0	0	0	0	0	0	0	0	0
32	PONDICHERRY	0	0.029503113	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	137715334	0.021548616	149974858	17038290	9460186	17805013	24209559	356100	484191	284880	387353	5935004	8069853	296750	403493

NOTE:

(i) HOT MEAL - I: ESTIMATES BASED ON ENROLMENT

(ii) HOT MEAL - II: ESTIMATES BASED ON AVERAGE ATTENDANCE AT 80 PER CENT ENROLMENT

TABLE 4.9

AGE SPECIFIC POPULATION AND GROS ENROLMENT RATIO

S. NO.	STATE	TOTAL POPPULN (CENSSUS 1991)	AGE-SPEC 6-11 I-V	POPLN- 11-14 VI VII	COL.3/ COL.1	COL.4/ COL.1	GROSS RATIO 1993-94 I-V	ENROLMENT VI-VIII
1	2	33	4	5	6	7	8	9
1	ANDHRA PRADESH	665508000	7027000	394920	0.11	0.06	108.4	63.7
2	ARUNACHAL PRADESH	1865000	107000	5780	0.12	0.07	115.8	54.5
3	ASSAM	224414000	3176700	185010	0.12	0.07	76.1	34.7
5	GOA	11170000	132000	7620	0.11	0.05	119.1	69.6
7	HARYANA	164464000	2021000	111360	0.12	0.07	102.8	70.9
8	HIMACHAL PRADESH	51171000	588900	34250	0.11	0.07	119.1	111.2
9	JAMMU & KASHMIR	77719000	867900	49200	0.11	0.06	88.8	64.7
10	KARNATAKA	449777000	5263900	299360	0.12	0.07	119.9	65.0
11	KERALA	290998000	3080500	176900	0.11	0.06	102.3	107.0
12	MADHYA PRADESH	661881000	7697900	426470	0.12	0.06	104.5	66.9
13	MAHARASHTRA	789337000	8138300	480750	0.10	0.06	119.4	80.7
14	MANIPUR	18337000	235600	11840	0.13	0.06	98.2	73.2
15	MEGHALAYA	17775000	228800	12590	0.13	0.07	74.8	40.5
16	MIZORAM	6590000	80300	4900	0.12	0.07	135.6	107.5
18	ORISSA	316660000	3531300	205420	0.11	0.06	96.8	57.0
19	PUNJAB	202882000	2146800	125150	0.11	0.06	90.6	67.8
20	RAJASTHAN	440006000	5789200	307520	0.13	0.07	91.0	53.9
21.	SIKKIM	4006000	59100	3220	0.15	0.08	117.6	59.6
22	TAMIL NADU	558559000	5796000	329860	0.10	0.06	145.0	101.4
23	TRIPURA	27557000	292300	5980	0.11	0.02	130.3	82.8
24	UTTAR PRADESH	1391112000	17127200	944810	0.12	0.07	89.3	55.0
25	WEST BENGAL	680778000	7401000	414300	0.11	0.06	123.9	93.8
26	A&N ISLANDS	2881000	42700	2140	0.15	0.08	93.2	79.9
27	CHANDIGARH	6442000	81900	4670	0.13	0.07	64.8	62.7
28	D & N HAVELI	1338000	16800	980	0.12	0.07	109.9	48.0
29	DAMAN & DIU	1002000	0	0.0	0.00	0	0	0.00
30	DELHI	94221000	1020900	60010	0.11	0.06	86.8	79.9
31	LAKSHADWEEP	552000	6000	310	0.12	0.06	141.5	111.3
32	PONDICHERRY	8008000	74500	4520	0.09	0.06	140.1	132.2
	TOTAL	8463003000	98111300	5537240	0.12	0.07	104.5	67.7

4.30 The food grain requirements of various alternatives are summarised in Table 4.10.

TABLE 4.10

REQUIREMENT OF FOOD GRAINS

(million tones)

	Hot Meal-I for 100 gms per child per day for 10 months	Hot Meal-II at 80 per cent attendance	Food for Education @ 5 kgs per month per child for 10 months
I. All enrolled children			
Class I-V	2.16	1.73	
Class I-VIII	2.96	2.36	
II. All enrolled children of 'poor' families			
Class I-V			1.80
Class I-VIII			2.46
III. Coverage of EAS Blocks			
Class I-V	0.74	0.59	0.61
Class I-VIII	1.00	0.80	0.83
IV. Coverage of LFL Blocks			
Class I-V	1.24	0.99	1.03
Class I-VIII	1.68	1.34	1.40
V. EAS LFL			
Class I-V	0.55	0.44	0.46
Class I-VIII	0.74	0.60	0.62
VI Non EAS/ICDS-LFL			
Class I-V	0.36	0.28	0.30
Class I-VIII	0.48	0.39	0.40

4.31 The estimated cost of foodgrains for the various options are summarised in Table 4.11.

TABLE 4.11
COST OF REQUIRED FOOD GRAINS AT CENTRAL ISSUE PRICE FOR RPDS

(Rs. in Million)

	Hot Meal-I for 100 gms per child per day for 10 months	Hot Meal-II at 80 per cent attendance	Food for Education @ 5 kgs per month per child for 10 month
I. All enrolled children and out-of-school children			
Class I-V	10908.0	8736.5	
Class I-VIII	14948.0	11918.0	
II. All enrolled children of 'poor' families and out of school children			
Class I-V		9090.0	
Class I-VIII		12423.0	
III. Coverage of EAS Blocks			
Class I-V	3737.0	2979.5	3080.5
Class I-VIII	5050.0	4040.0	4191.5
IV. Coverage of LFL Blocks			
Class I-V	6262.0	4999.5	5201.5
Class I-VIII	8484.0	6767.0	7070.0
V. EAS LFL			
Class I-V	2777.5	2222.0	2323.0
Class I-VIII	3737.0	3030.0	3131.0
VI. Non EAS-ICDS-LFL			
Class I-V	1818.0	1414.0	1515.0
Class I-VIII	2424.0	1969.5	2020.0

Wheat 50% @ Rs.352 per quintal
Rice 50% @ Rs.658 per quintal

4.32 In working out these costs it has been assumed that wheat and Superfine rice would be supplied in equal measure; the prices are central issue prices for RPDS. To the extent that more of common and fine varieties of rice are supplied the costs would be lower.

4.33 Calculation of the food grain with central issue price for RPDS does not fully take into account the total cost of the food grain provided. According to the projections made by the Food Corporation of India in its Performance Budget for 1995-96, the estimated economic cost of rice and wheat would be Rs.748.80 and Rs.576.00 per quintal respectively. Since this economic cost is the actual liability on central government, the estimated cost of food grains at these rates have been worked in Table 4.12. Again it is assumed that supply of superfine rice and wheat would be in equal propotion. The same caveat of the cost being lower to the extent of common and fine varieties of rice being supplied applies.

TABLE 4.12
COST OF REQUIRED FOOD GRAINS
AT ECONOMIC COST

(Rs. in Million)

	Hot Meal-I for 100 gms per child per day for 10 months	Hot Meal-II at 80 per cent attendance	Food for Education @ 5 kgs per month per child for 10 month
I. All enrolled children and out-of-school children			
Class I-V	14307.84	11459.52	
Class I-VIII	19607.04	15632.64	
II. All enrolled children of 'poor' families and out of school children			
Class I-V		11923.20	
Class I-VIII		16295.04	
III. Coverage of EAS Blocks			
Class I-V	4901.76	3908.16	4040.64
Class I-VIII	6624.00	5299.20	5497.92

Table 4.12 (contd.)

	Hot Meal-I for 100 gms per child per day for 10 months	Hot Meal-II at 80 per cent attendance	Food for Education @ 5 kgs per month per child for 10 month
IV. Coverage of LFL Blocks			
Class I-V	8213.76	6557.76	6822.72
Class I-VIII	11128.32	8876.16	9273.60
V. EAS LFL			
Class I-V	3643.20	2914.56	3047.04
Class I-VIII	4901.76	3974.40	4106.88
VI. Non EAS-ICDS-LFL			
Class I-V	2384.64	1854.72	1987.20
Class I-VIII	3179.52	2583.36	2649.60

Wheat 50% @ Rs.576 per quintal
Rice 50% @ Rs.748.80 per quintal

4.34 **We suggest that the rate of issue of foodgrains for the scheme may be made at the Central Issue Price for RPDS areas for the following reasons:**

(i) **This will ensure uniformity of issue prices as the scheme is proposed to be largely implemented in the same blocks covered under RPDS.**

(ii) **This will also ensure uniformity in fixing the margins of wholesalers and retailers in all the States/UTs, as a uniform norm of 25 paise per Kg. of foodgrains s being followed by all the State/UTs to cover the costs of transportation and margins to wholesaler and retailers in the RPDS areas.**

CHAPTER V

LOGISTICS : AN OUTLINE

5.1 There are four broad aspects:

(i) identification of beneficiaries;

(ii) the arrangements required for preparation and service of hot meal, if that variant is adopted;

(iii) delivery of foodgrains to villages; and

(iv) monitoring, supervision and evaluation.

IDENTIFICATION OF BENEFICIARIES

5.2 With the hot food variant, identification presents no problem as all students in the classes covered would automatically be covered. With the Food For Education variant identification has two aspects:

(i) whether the student belongs to a poor family; here the norms adopted for poverty alleviation and income generation programmes administered by Department Rural Development can straight away be adopted; this would obviate the development of alternate criteria;

(ii) whether the student has the requisite attendance.

5.3 We **would suggest that a minimum of 80 per cent attendance be stipulated**; the eligibility for receiving the food grains in a month would be linked with the attendance in the previous month. We would further suggest that the attendance be jointly certified by the head of the school and the Village Education Committee or an equivalent body like the Panchayat Education Committee or the Mother/Parent Teacher Council to ensure its bona fide.

5.4 We **would also strongly suggest that simultaneously with the implementation of nutrition support, effort be made to converge with other services and also operationalise the strategies of microplanning** commended for universalisation in which the VECs/Mother/Parent-Teacher Associations would conduct systematic house-to-house surveys in co-operation with teachers, would discuss with the parents, the relevance of schooling and regularity of attendance and persuade all the parents to regularly send school-age children to school. It would also be desirable to have the list of families eligible for the support widely publicised through modes such as placing the lists in the notice board of the Panchayat Office and dissemination at the Gram Sabha. For RPDS, Vigilance

Committees were formed comprising consumer organisations and women's groups to oversee supply of foodgrains to the beneficiaries and to detect bogus claimants. These committees may be requested to oversee the Food For Education programme also.

LOGISTICS FOR PREPARATION AND SERVICE OF HOT FOOD

5.5 Conditions vary vastly and therefore the **state should assume the responsibility for setting up the necessary arrangements for preparation and delivery of the hot food variant.** The following general principles may be kept in mind:

(i) Revenue/General administration departments should play a major role in ensuring delivery of foodgrains and effective organisation of the programme.

(ii) It has been the experience that entrusting mid-day meal work to teachers would make serious inroads into their teaching time. It is absolutely necessary that teaching learning time is not eroded by the programme. The educational supervisory cadres are already too overstretched to adequately supervise the schools and provide academic guidelines. It is not desirable to entrust additional responsibilities to them.

(iii) Creation of large governmental cadres, what ever they be, is undesirable; therefore alternatives should be actively explored. These include entrustment to NGOs, DAWCRA Groups, dovetailing with ICDS, and including processed food wherever possible.

(iv) Procurement through the Public Distribution System wherever possible.

(v) Effective arrangements for procurement and supply of provision not available through Public Distribution System.

(vi) Ensuring that the food supplied is not monotonus, conforms to nutritional principles and is prepared under hygenic conditions

(vii) Active role for the local bodies such as Village Education Committees, Panchayats, Mother/Parent Teacher Councils and non-governmental organisation in facilitating and overseeing the programme and ensuring that attendance of children is spread throughout the school hours.

DELIVERY OF FOOD GRAINS

5.6 With either the hot food or the Food For Education variant implementation is critically dependent on the delivery of food grains in the village on a continuous basis. The programme would be a failure if the institutional mechanism for delivery of food grains in the village is erratic or non existent. Just to give an

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indication of the magnitude of foodgrain distribution it can be expected that, with EAS blocks as the selection criteria three lakh villages would be covered.

5.7 The details of the existing arrangements for delivery of foodgrains in Gujarat and Tamil Nadu are described here to convey a flavour of the arrangements needed.

5.8 In Gujarat State the food items are procured by Gujarat State Civil Supply Corporation for mid-day meal scheme. The Civil Supply Corporation procures the required quantity of rice and wheat from Food Corporation of India, whereas items like pulses and oil are purchased from open market on the basis of the tender. The required quantity of food grains is provided to each taluka by Civil Supply Corporation. After procuring the food items, the Civil Supply Corporation is required to reach the food grains right up to their own godown at the taluka level. After the food grains reach the taluka level godown of the Corporation, the fair price shop owners under the concerned taluka are required to obtain their own requirements of food grain from the Civil Supply Corporation godown. The requirement of each Mid-day Meal (MDM) centre is assessed by the taluka Mamlatdar on the basis of the number of beneficiaries in each centre, multiplied by quantity of food grains as prescribed for each beneficiary per day. This is done usually on a monthly basis. The Mamlatdar issues permit to both organiser of MDM centres and respective fair price shop owner specifying quantity of food grains to be issued and the relevant period. Account of receipt and of food grains is kept at all the respective levels. For example, Mamlatdar Office keeps the record of the permit issued. The Corporation godown also keeps its own account of food grains received and distributed to each fair price shop while the fair price shop owner also keeps the record of how much food grains has been given to each of the centre attached to it. The organiser of the centre is expected to keep thorough account on month to month basis in prescribed forms of all the items of food grains received from fair price hops including iodised salt, vegetables, spices and condiments required for preparing the meals, etc. The organisers of centre in turn obtain their own quotas of food grain from fair price shop to whom they are attached. The requirement made to Civil Supply Corporation includes transportation and handling charges which come to approximately, 35 paise. First of all the State Government releases the grant to Commissioner, Mid-Day Meal on periodical basis and MDM Commissioner in turn releases the grant to each district. The district Collector thereupon make repeat order and releases the grant to each taluka based on their requirement. The Civil Supply Corporation is paid by Mamlatdar based on the total amount of food grain lifted from fair price shops. The fair price shop owner are also given a nominal commission per kg. of food grains as an incentive, which is also included in price paid to Civil Supply Corporation.

5.9 In Tamil Nadu, the requirement of food commodities for each centre per month is supplied at the feeding centre by the Tamil Nadu Civil Supplies Corporation. Indent is made for 45 days supply and replenishment charge from Civil Supplies godown to noon meal centre is paid at 1.4 per cent and, in addition 0.4 per cent is allowed for handling margin. The Civil Supplies Corporation is fully responsible for the procurement and transportation of commodities to the

noon-meal centre. They are to bring the weighing scales alongwith the goods and measure them in the presence of noon meal staff while delivering the commodities. The District Collectors and District Social Welfare Oficers are empowered to check the above work. Vegetables are procured from the local super markets.

5.10 In both Gujarat and Tamil Nadu, thus , the Civil Supplies Corporation plays an imporatant role in the delivery of foodgrains; in Gujarat, the Public Distribution System (PDS) is also fully involved. **In states where the public distribution system is strong in rural areas it would be logical to utilise the existing net-work of FPSs for distributing the foodgrains to the vast number of schools to be covered under the programme. In other states, he state governments would have to develop alternative modalities for transpor of foodgrains from FCI to villages.**

5.11 Under the existing arrangements Commodties are distributed to the consumers under the Public Distribution System (PDS) through the net-work of more than four lakh Fair Price Shops (FPSs) in the country. The FPSs are licensed by the State Governments/UT Administrations. These are run by private individuals, coperatives or State Civil Supplies Corporations. The Central Government is responsible for making bulk allocations of PDS commodities to the State Governments/UT Administrations and for delivering the allocated commodities to the nominees of the State Governments/UT Administrations on payment, as per authorisation issued by them. Deliveries are made from the designated delivery depots of the Food Corporation ofIndia (FCI). Rice and wheat are procured, stored, transported and delivered to the nominees of the States/UTs by the FCI. Thereafter, the State Governments/UT Alministrations have to assume responsibility to ensure distribution to the consumers.

5.12 FCI had distributed eight million tones of rice and five million tones of wheat during the period, January to December, 1994,through the PDS/RPDS. In the past, FCI had distributed upto a maximum of 19 million tones of foodgrains in a year for the PDS (1991-92). Therefore, no problem isenvisaged by the Department of Consumer Affairs and Public Distribution Systen, in the FCI handling the foodgrains request of nutrition support to education.

5.13 In the present system of distribution of PDS foodgrains, payments are made the recipients at every stage of delivery of foodgrains In other words, FCI issues foodgrains to the nominees of the State Governments only on payment. The wholesale nominees of the State Government deliver foodgrains to the FPSs according to the deposit made by the FPS operators with them. The FPSs sell the commodities to the consumers at the end - retai price fixed by the State Governments. Ideally, the same system of payments should be adopted for delivery of foodgrains to the Nutrition programme also. However, it is felt that it may be cumbersome to disburse payments to the school to enable them to purchase the foodgrains. A system of coupons can be adopted as has been done by the Madhya Pradesh Government for distribution of foodgrains under Jawahar Rozgar Yojna and EAS. Under such a system, the State Governments will assess the requirements of the schools covered under the programme and arrange to issue vouchers or coupons

to the required extent every month to the schools. The schools will be allowed to lift foodgrains against the deposit of these coupons with the FPSs. The FPS operator will be allowed reimbursement of cash against the deposit of these vouchers by the wholesale nominees or a designated official as the case may be.

5.14 This system envisages that the FPS operator will initially make the payments for lifting the foodgrains. As no payment will be made to him by the beneficiary schools, he will be have to be reimbursed cash at the rate of end-retail prices fixed by the State Governments which would include the retailer's margin and transportation cost. Once installed, this system can be continued regularly for meeting the supply requirements for the Nutrition Support Programme.

5.15 At the State level, this mechanism would require sufficient funds with state government atleast for a three month period . One way to assist the states is to provide a Ways and Means advance to cover three months requirements of food grains worked out on the basis of the Central Issue Price for RPDS and the estimated requirements for a three month period based on the selection criteria adopted.

COORDINATION, SUPERVISION, MONITORING, AND EVALUATION

5.16 We perceive Supervision, Monitoring, and Evaluation as part of a larger framework for convergence of early childhood care and education, primary education, primary health care and nutrition. Therefore, the arrangements we have suggested broadly follow the guidelines issued by the Planning Commission.

5.17 Implementation of the programme requires two streams of imperatives :-

(i) flow of food grains from FCI godowns to the villages

(ii) enrolment data which determine the entitlement.

5.18 The details of Management Information System (MIS) have to be worked out with precision. The reporting system will be designed in consultation with MIS specialists, to facilitate communication of reports from the districts and their collation at the State and Central Government levels through the net work of the National Informatics Centre.

5.19 Most of the settled programmes have their supervisory level functionaries at the sub-district levels. These supervisors should hold monthly meetings jointly in which performance is reviewed as a whole. Plans can also be developed in such meetings for joint future activities, monitoring, reporting and reviewing systems. Sub-district level, Panchayat Organisations should be involved in such meetings. SDOs and BDOs can play a useful role in making these meetings effective by bringing about greater co-ordination and highlighting thrust areas. The women members of Panchayats may be actively associated with the supervision of the implementation of the programme.

5.20 At the district level, the Collector/CEO should co-ordinate all activities. A district level Committee should be set up under his chairmanship with the district level officers of all departments concerned with these programmes. This Committee should meet regularly atleast once a quarter the review the progress of convergence of programmes, its planning and implementation.

5.21 A Co-ordination Committee should be set up at the state level with the Secretaries and Heads of the Departments of the concerned Departments under the Chairmanship of Chief Secretary/Senior most Secretary.

5.22 At the central level there should be a Monitoring Committee under the Chairmanship of the Education Secretary. Planning Commission, Ministry of Finance, Ministry of Women and Child Development, Ministry of Health and Family Welfare, Department of Food Procrument and Distribution, Department of Consumer Affairs & Public Distribution system, Department of Rural Development and Food Corporation of India should be represented on this Committee. The Committee should meet periodically and review/follow up the implementation of this scheme. The Education Secretary should also, from time to time, hold review meetings with the State Education Secretaries to ensure the smooth functioning of the schemes in the field and get a feedback about the implementation of this scheme.

5.23 It was also be necessary to evaluate the system through independent agencies. The Programme Evaluation Organisation of the Planning Commission and independent agencies may be reported for evaluating the programme immediately after one year of its implementation.

5.24 The Department of Education, Government of India may set up a system for concurrent monitoring through independent organisation in such a way that every district covered by the schemes is subjected to concurrent monitoring and evaluation by an independent external agency atleast once in a cycle of an year. The practice followed by Ministry of Rural Development may suitably be adapted.

CHAPTER VI

COMMUNITY PARTICIPATION

6.1 It is now axiomatic that development must be socially just, economically viable and environmentally benign and, for that purpose, people have to be placed at the centre of planning and implementation. Education, as perceived by the National Policy on Education, 1986 is an instrument for empowerment of people. Involvement of local community, village panchayat and non-governmental organisations is critical for the successful implementation of a programme of nutrition support to education. It is now well established that the process of development can be accelerated only by promoting the participation of people and the community in a perspective that includes designing and implementation of such activities. Developing on this theme, *the Programme of Action, 1992* states unequivocally that *the successful implementation of programmes like elementary education including non-formal education, early childhood care and education, adult education, education of the disabled, etc., will require people's involvement at the grass roots level and participation of voluntary agencies and social activist groups on a much larger scale.* The Total Literacy Campaigns, with their unique social mobilisation of community and non-governmental organisations and partnership between government, NGOs, teachers and others have demonstrated how governmental efforts can be effectively supplemented and through people's participation. The one message that comes out loud and clear from these campaigns is that social welfare, including educational goals, cannot be achieved without the enlistment of non-governmental efforts.

6.2 In a programme like nutrition support for education multiplicity of functionaries and agencies are involved. It is only the local communities that can ensure that multiple functionaries act together and synergies are derived by the convergence of multiple but related schemes to achieve the objectives of the programme. The 73rd and 74th Constitution amendments have paved the way for enhanced participation of local community in education, health and other related programmes. The Report of the CABE (Central Advisory Board of Education) Committee on Decentralised Management of Education indicates how educational structures should be set up at the district, block/taluk levels in pursuance of these Constitution amendments. It has also suggested ways for mobilising community participation in the educational process so that power devolves on the people in the true spirit of the amendments. We would suggest that state governments may keep in view the recommendations of the CABE committee while formulating scheme for nutrition support to education. A major aspect of the decentralised management of education as envisaged in the Panchayati Raj Act is the formation of Village Education Committees which would be responsible for the administration of education programmes at the village level. The main responsibilities of the VECs would lie in operationalisation of micro-level planning in school mapping in the

village through systematic house to house surveys and periodic discussions with parents. Ensuring participation in primary education of every child of every family would be one of the prime aims of the VECs. The programme of nutrition support to education being one of the measures to induce attendance in elementary schools, the responsibility for proper implementation could be entrusted to the VECs wherever they have been set up. The VECs shoud also be able to ensure that the programme is implemented in the right manner and the intended benefits reach the intended beneficiaries, whether it is the hot meal variant or the Food for Education variant. Particularly in the Food for Education varant, the VEC can ensure that it is the really deserving who are covered by the programme.

6.3 Apart from the VEC, the Village Pachaya and the Panchayat Samiti should also be actively involved in the programme. They can play a very effective role in the supervision of the arrangements for the hot meal variant and, in the case of the Food for Education variant, in its distribution. We would strongly urge the active involvement of the Women Panchas in the programme.

6.4 We have elsewhere referred to the laudible role the Mother - Teacher Associations are playing in the implementation of the Tamil Nadu Noon Meal programme. The Mother/Parent Teacher Associations and groups like the DAWCRA can effectively supervise the functioning of the hot meal programme in the schools to ensure that the food is prepared and served to the children in hygienic conditions, that the food is to the taste of the children, that there is enough variety in the menu to avoid monotony in the fare served. Their presence at the time of service should also help in orderly distribution and in guaranteeing that no child is discriminated against in the matter of quantity of food served. It is natural to expect that an actively involved Association would chip in with additionalities in the food served. Further, the presence of at least some mothers at the meal time will create a homely atmosphere for the children.

6.5 The non-governmental organisations, including the consumer groups, apart from contributing to the programme, can serve as watchdogs against misappropriation and misutilisation. Constant vigilance is the only guarantor of effective functioning of any welfare programme. The role of NGOs is particularly heightened in the Food for Education variant. Bogus enrolment figures, inclusion of undeserving families in the list of beneficiaries, non-issue of the allotted quantity of food grains to the beneficiaries, poor quality of the food grains issued, etc., are the areas which require to be closely watched. The NGOs, through occasional visits to the schools and the PDS shops can detect malpracices and bring them to the notice of the authorities expeditiously. The kind of Vigilance Committees envisaged under the Revamped Public Distribution System which comprise card holders (i.e., beneficiaries), consumer organisations and women's groups to oversee working of Fair Price Shops, supply of essential commodities to the beneficiaries and to detect bogus ration cards is an emulative step for invovement of community and non-governmental organisations in the nutrition suppor for education programme. They can also play a very effective role in creating parental awareness and thus enhancing enrolment and retention in schools.

CHAPTER VII

CENTRAL SUPPORT : PARAMETERS

7.1 While ultimately the objective should be to cover all elementary education children through a Mid-Day Meal Programme envisaged as an integrated package of early childhood care and education, nutrition, school health and primary education, **the entry point for such a comprehensive programme can be nutritional support to elementary education in EAS blocks with low female literacy rates. If the initial coverage is to be larger, all EAS blocks or all EAS blocks as well as ICDS blocks not covered by EAS but have low female literacy could be covered.** It is also desirable that all blocks in DPEP districts are covered. Further, atleast ten per cent of the blocks in a state or union territory may be covered in a state or union territory which is excluded by the criterion selected. Classes I-VIII may be covered so that along with the academic and pedagogic measures being taken, nutritior support becomes a means to achieve the NPE objective of free and compulsory education of satisfactory quality to all children below the age of fourteen years before we enter the twenty-fist century.

7.2 **The parameters of Central support can be as under:**

* **Centre would share the cost of implementing the nutritional support of elementary education by providing the food grains required at FCI godowns at central issue prices applicable to RPDS.**

* **Government of India may take a view on the options available in regard to areas and blocks to be covered.**

* **Each State may have its own specific scheme with appropriate infrastructure and delivery system within the foodgrain that the State would be entitled to under the option offered by Government of India.**

* **On - going programmes of nutrition support would be eligible for central support subject to these parametes.**

* **States may have an option of determining the mode of delivery of nutritional support, that is to say, whether they would like to provide hot meal of pre-cooked food or Food For Education or a combination.**

* State should supplement central effort by ensuring transport and delivery of the graint at the village/school and with arrangements for cooking and serving and supply of micro nutritients in case of hot meal variant.

* Simultaneously states may take steps to converge related services and programmes in the field of Early Childhood Care and Education, primary education, nutrition and health.

* Central support would be conditional on States conforming with the parameters approved by the Government of India and satisfactory arrangement heing made for the implementation of the programme.

* Initial foodgrain allotment may be related to average attendance of 80 per cent and the enrolment in classes I-VIII in 1993-94.

* The broad principles of allocation of food grains could be as follows
  ** district would be the unit of allocation;

  ** allocation by Government of India would be made every month for a three month period;

  ** the initial allocation could be for a quarter based on 1993-94 enrolment and average eighty per cent attendance;

  ** from the fourth month of commencement of scheme in a state monthly allocation may be made based on the off-take figures received from FCI (the normal time-lag is 4-5 weeks) and the utilisation certificates and enrolment data received from the states (with a time-lag of 2 months).

* Ways and Means advance of three months to be provided to state Governments to facilitate lifting of foodgrains from FCI grdowns. The Ways and Means advance would be calculated on the following basis:

  ** initial foodgrain allotment;

  ** assuming that the allotment of wheat and rice is in the ratio of 50:50 and that rice is of the super fine variety.

* Department of Education would be the nodal agency for implementation of the programme in Government of India; the State Government may designate an appropriate department, preferably Education to be the nodal agency.

7.3 There is no doubt that in the years to come nutrition support to education would become an important component of a comprehensive equity package for education, health and social velfare measures. In view of this equity dimension, government may consider expanding the scope of the programme at the time of the formulation of the Ninth Five Year Plan. In the light of experience gained in the implementation of the programme during the Eighth Five Year Plan, modification as may be necessary may be incorporated in the above parameters at the time of review.

GUIDELINES FOR A SCHEME OF CENTRAL ASSISTANCE FOR PROVISION OF MID-DAY MEALS TO CHILDREN IN PRIMARY SCHOOLS IN THE COUNTRY DURING THE SEVENTH FIVE YEAR PLAN

Provision of free and compulsory educaton for all children until they complete the age of 14 years is a constitutional goa. According to the policy frame of the Sixth Five Year Plan,, reinforced by tle 20-point Programme of the Government of India, Universalisation of Elementay Education is to be achieved by 1990. Various measures have been envisaged and undertaken to achieve this goal both at the Central and State levels. One of the important measures is provision of various incentives like free text-books and statiorery, free uniforms, attendance, scholarships and mid-day meals. The Mid-day meals programme for primary school children occupies an important place in the over all strategy in as much as it would work to alleviate poverty to an extent and at the same time strengthen the educational programme in the country by increasng enrolment, reducing school drop-outs and improving the health of the children tiereby bettering their absorption capacity. As the benefits of mid-day meal programme accrue directly to the targetted group, which is fully identified, this would be a very effective programme for alleviation of rural poverty.

2. Considering the potential for giving freshly cooked balanced diet to primary school children, Government of India have decided o launch financial assistance for implementation of such a scheme by the States/UTs in a phased manner during the Seventh Five Year Plan. The following are the guidelines to be observed by the State Government, in formulating the scheme for sibmission to the Government of India for sanction.

i) The scheme should cover all children in primary classes (upto and inclusive of Class IV or Class V, as tle case may be) in government - aided and local body schools. Children in pre-primary classes, wherever such classes are functioning as part and parcel of primary schools, will also be covered, provided they are not covered in the feeding programme under ICDS.

ii) The scheme should cover all the prinary school children by the end of the Seventh Five Year Plan, i.e., by 1989-90. The coverage will be in a phased manner as enumerated below:

(a) In 1985-86, 20 per cent of the total enrolment, as in July, 1985 will be covered.

(b) In 1986-87, 40 per cent of the total enrolment as in July, 1985 and the additional enrolment during the academic year 1985-86 will be covered.

(c) In 1987-88 60 per cent of the total enrolment as in July, 1985 and the additional enrolments during the academic year 1985-86 and 1986-87 will be covered.

(d) In 1988-89 80 per cent of the total enrolment as in July, 1985 and the additional enrolments during the academic year 1985-86, 1986-87 and 1987-88 will be covered.

(e) In 1989-90, 100 per cent of the total enrolment as in July, 1985 and the additional enrollments during the academic years 1985-86, 1986-87, 1987-88, and 1988-89 will be covered.

In attempting the coverage mentioned above, it should be ensured that schools in Blocks/Districts are so chosen that all the children in the selected schools are given the mid-day meals. In other words, it should be ensured that in no school some children get meal and some others do not get it.

iii) A block on which various developmental activities converge would be a compact area for implementation of this scheme as well as for evaluation later Selection of blocks in the initial phases should appropriately cover the districts which are considered as educationally backward on the basis of low literacy rate, particularly of female literacy. It would be advantageous to select ICDS blocks to start with for implementation of this scheme as they are located in backward areas and urban slums and feeding of pre-school children is already taking place under this scheme. In the selection of blocks, the facilities available for timely supply of food grains should also be taken into account.

iv) For increasing enrolment and retention and improvement of health and nutritional status of children the States should ensure that the schools covered under the mid-day meals scheme, as soon as possible, are covered by a comprehensive school health programme also.

v) Mid-day meal shall be provided to the children on all school working days (220 in a year)

vi) Components of mid-day meals and their cost will be as below:

a)	Cereals (100 gms)	20P
b)	Pulses (10 gms)	7.5 P
c)	Edible Oils (5 gms)	10 P
d)	Condiments and Fuel	10 P
e)	Management and Admn.	20 P
	Total	67.5 P or say 68P

Whereas some components may be changed to suit any state's particular requirements the total cost of the meal would have to be restricted to RS. 0.68 as stated above.

vii) The expenditure will be shared between centre and the states/UTs equally. As such the central assistance to meet this expenditure will be restricted to 34 p per child per day

viii) In computing the central share of assistance the existing coverage with CARE assistance will be excluded. This is to ensure that the same children are not counted both under the scheme run with CARE assistance and the centrally-sponsored scheme. In the states where a scheme of mid-day meal is in operation with partial or universal coverage the central share will be available only in a graded manner in accordance with the yearly coverage indicated in (ii) above.

ix) Cereals and, to the extent possible, pulses, edible oils and condiments should be supplied to the schools through an authorised State agency. The stock levels of these commodities in the schools and their further requirements should be monitored at regular intervals to ensure that the prescribed utilisation takes place and that no school runs short of these commodities. Since most of the primary schools are located in villages including the backward and far flung areas, the State Governments may have to make use of the Civil Supplies Corporation, Cooperative Agencies, or other departmental agencies to establish a delivery system on a regular and efficient basis. The Food Corporation of India would make delivery of the stocks of wheat and rice to the State Government's agency nominated for the purpose only at its depots at the central issue prices. The nominated State agency would take the cereals from there and pulses, condiments and edible oils separately procured by it to schools. Information about the estimated requirement of grains under the scheme on the basis of the number of children in the primary schools to be covered has to be given to the Department of Food, Government of India separately at the commencement of each year.

x) The menu for the Mid-day meal scheme should utilise wheat to the maximum extent and utilisation of rice should be discouraged as far as possible. Supply of rice would be restricted to only predominantly rice eating areas. Even there, a modicum of wheat should form part of the scheme. If some other grains locally used are available, the states can utilise them under this scheme.

xi) The states/UTs would make arrangements for appointment of cooks, helpers and supervisors for implementing this scheme. As far as possible, the cook should be a woman and both the cook and the helper should be from the same village

xii) The scheme hould provide for necessary involvement of headmasters/teaciers. The states shouild also make other necessary administrative arangements at various levels such as block, district and state for supervision, management and monitoring. Rs. 0.20 per meal provided for management and administration is to cover expenses on all arrangements as well as for purchase of necessary utnesils.

xiii) The scheme shculd provide for necesssary arrangements for proper storage of food naterials, cooking and sserving food.

xiv) The scheme shoild provide for an effecctive management information system with inbuilt inspection, monitoriing and evaluation, etc.

xv) The states/UTs should seek maximum public cooperation by involving local people's representaatives for ensuring regular availability of tle materials, their transsport, and storage, preparation and serving of neals to the children. PPublic cooperation in cash and kind should be encouraged.

xvi) While considerale staff will be needecd for efficient management of this scheme, car should be taken that mo large parallel administrative machinery is created for this purpose.. Efforts should be made to device a system under which the existirng administrative machinery is fully utilised.

xvii) Whereas tight supervision is required ffor efficient implementation oi the scheme, there should be fullest ddelegation of powers at every stage of the system for smooth functioming. It has to be ensured that sanctions are issued expeditiously and delays in payment of wages to cooks and helpers are eliminated. The school will need authorisation for drawing raions from the fair priice shops. For this purpose efficient mechaiism has to be deviceed. Sufficient advance money should be availaole to the school for prrovision of meals at least for a fortnight. This will ensure that meals are served right from the start after vacations and without any break. It would not be necessary to seek sanctions for local expenses from offices/officers above district level. A decenralised but effective arrrangement should be made for local purchases, wherever necessary amd such purchases should be to the minimum.

xviii) At the district level there should be a Committee under the chairmanship o the district collector tto oversee the implementation of the scheme comprising of the functionaries engaged in the implementation of the scheme. The Diistrict Educaton Officer should be the conveno of this committee. IIt will be the responsibility of this committee o ensure smooth functiioning of this scheme with the

cooperation of all concerned, so as to remove any bottlenecks that may impede the functioning.

xix) At the state level, there should be a committee under the chairmanship of the Chief Secretary to overview and monitor this scheme. While Education Secretary will be the convenor, secretaries/heads of concerned departments like rural/community development, cooperation, social welfare, health, civil supplies and food should be represented on this committee. It may meet once in a month in the first year of operation of this scheme and later once in a quarter.

xx) At the central level, there will be a Monitoring Committee under the chairmanship of Education Secretary. Planning Commission, Ministry Finamce, Ministry of Social Welfare, Ministry of Health and Family Welfare, Department of Food, Department of Civil supplies and Food Corporation of India will be represented on this committee. The committeee will meet periodically and review/follow up the implementatiorn of this scheme. The Education Secretary will also from time to time review in meeings with the state Education Secretaries to ensure the smooth functioning of the scheme in the field and get a feed back about the implementation of the scheme.

xxi) Each state willl prepare a scheme in detail for 1985-86 indicating the coverage proposed during 1985-86 and that envisaged in subsequent years of the Seventh Five Year Plan. The scheme should mention infrastructural facilities available, proposals for strengthening the same, financial arrangements, arrangements envisaged for recruitment of staff, preparatory work to be done for starting the scheme, duties and the responsibilties at various administrative levels, etc.

xxii) The scheme should be sent to the Ministry of Education with a copy to the Adviser(Education), Planning Commission. This will be examined in the Ministry of Education in consultation with Planning Commission and Ministry of Finance. After the scheme is approved, Ministry of Education will release the grants in suitable installments.

ANNEXURE-II

PROFILE OF RESEARCH FINDINGS ON THE IMPACT OF MID-DAY MEAL PROGRAMME

1. Impact of Mid-day Meal Programme - a national level study by NCERT (1981-82)

2. Nutrition and Educational Achievement (study by Ernesto Pollitt)

3 School Feeding Programmes: Myth and Potenttial by Beryl Levinger

4. School Nutrition Programmes with WFP Assiistance : Scope and Salient Impact

5. Summary of Comment of Study on State Mid-day Meal Programmes by National Institute of Ntrition, Hyderabad

6. Extract from 'Improvin Primary Education iin Developing Countries by Marlaine E. Lockheed, Ariaan M. Verspoor and Associates (1991).

7. Excerpts from Evaluatin of the 'Improved MDMP' in Gujarat by Tara Consultancy Services (194).

1. IMPACT OF MID-DAY MEALS PROGRAMME

A National level study by NCERT at the instance of USAID

About the Study

- Undertaken in 1981-82.

- All the 13 States which are implementing CARE supported mid-day meal programme were to be covered in the study - Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu. Kerala was excluded because of non-availability of data. Thus 12 States weree covered.

- Districts were taken as Unitts of measurement excot in Haryana and Karnataka. In these two States, Educational Blocks/CD Blcks were taken as Units of measurement. (Study in Haryana was based or complete enumeration in all the Educational blocks. Study in Karnataka was done in C.D. Blocks of Districts randomly selected)

- Study was based on time series data periodically collected by various governmental agencies.

- Reference years and geogrraphical coverage:
  1973 - 12 States with 2777 Districts
  1978 - 11 States with 2511 Districts

- Scope of study delimited tco two hypothesis:-

  (i) MDM significantly iincreased school enrolnent or participation rate of children; and

  (ii) MDM significantly rreduced drop-out and roetition rates of children and increased their retenttion in the educational cycle.

- Variables taken into considerration :-

  * Total enrolment in Classes I to V
  * Estimated total popullation in the age-group of 6-11
  * Girls' enrolment in Classes I to V.
  * estimated total femalee population in the age-group of 6-11
  * Enrolment of SC/ST
  * Availability of educattional facilities.
  * Availability of trained teaches, teacher-pupil ratio etc.
  * Economic incentives to attract children to scools.
  * Socio-economic levell of development of Districts

10—209 Deptt. of Edu./95.

- Acronyms used in the study

  * ERT - Total Enrolment Rate
  * ERG - Girls' Enolment Rate
  * PB - Percentage of Beneficiaries
  * CERT - Change n Total Enrolment Rates
  * RRG - Girls Retntion Rate
  * RRS - RetentionRatio for SC/ST
  * RRT - Total Retntion Rates
  * CPB - Changes n Percentage of Beneficiaries

- Findings

Total Enrolment Rate, Enrolment Rate for Girls & Percentage of Beneficiaties:

- The policy on coerage of Mid-day meal programme (MDM) varied from State to Stte. This variation had important bearing on the relationship betwen ERT/ERG and PB. (Some States had their own MDM programms, apart from CARE supported programmes, while others had only CARE MDM programme). While in District level and Block level studie, PB was seen to be inversely related to EFT, there was evidence that MDM programme hellped in bringing more children to schools.

- In the District levelstudy, ERT means of MDM Districts were higher than those of non-MDM Districts. These dlifferences might, however, have been due to the inluence of socio-econcmic and other educational factors on ERT.

- ERG was dependent on PB. Higher ERG means were noticed for low intensity of PB. n Karnataka contributtion of PB to ERG reduced over a period of time, suggesting that MDM programme increased ERG.

- Change in ERT was high in those districts where the percentage of beneficiaries in ne base year was high. This relationship was more prominent in the case of girls. Thiss indicated that high intensity of MDM programme continued over a period of time in the schools did work as an effeecive incentive.

Total Retention Rates & Those For SC/ST

- Retention of girls and SC/ST childrem at the primary stage was lower than total retentim. Retention rates were more strongly related to socio-economic variables than educational variables.

- Higher RRT was not noticed in respec of districts with MDM programmes than those without them. RRT were, however, higher for Districts having higher walues of PB.

- Study in Haryana providied strong indications in support of the impact of MDM programme on RIRT. RRT mean of MDM blocks was higher than that of non-MDM blockss.

- RRG means of MDM districts were highe than that for non-MDM districts, though these differences ceased o exist when adjusted for influence of other factorss.

- Impact of MDM programme on RRS was not evidenced. However, RRS means in Karnataka had higher values for higher intensity of MDM programmes.

2. NUTRITION AND EDUCATIONAL ACHIEVEMENT
(Nutrition Eduction Series, UNESCO, Issue No.9, 198$)

Ernesto Pollitt, inter ali, has recorded the follcowing conclusions, based on a review of studies on relationshp between nutrition amd Education - to bring home that nutrition is an "important ieterminant of educatiosnal performance" and "potent resource to decrease educationl wastage", **though conclusive inference inference based on the above studies ar unwarranted;**

- Iron deficiency anemia mong school students represents an impediment to learning. This evidenc has educational impllications which are dramatic, because of the large numer of children likely to be anemic both in developing and developed countries. It has been estimated tthat there are about 1.3 billion people who are anemic round the world. The effects of iron deficiency on cognitive function are reersible. Iron repletion therapy among iron deficient anemic pre-adolescent children resulted in signifficant improvements in school achievement measures. The underlying mechanisms whereby iron deficiency affects learning are not known. Impediment in learning does not necessarily mean, however, that hiher cognitive processees have been affected. Iron deficiency is likely to afect the level of alertnesss (arousal) of children, which in turn affect attention and, therefore, learning.

- Among well-nourished hildren, a nineteen to twenty hour fasting period affects attention, and the capacity to solve problems of visual perceptual organisation. There is lso suggestive evidence from evaluations of school feeding programme in eveloped countries that not taking breakfast affected performance in reading ad arithmetic tests.

- Children with low calorie intake over long perriods of time reach a state of energy balance throug reductions in activity level. Activity is a key mechanism whereby children explore, and relate to their social and physical environment. Thus, reductions in activity represents a loss of significant opportunities for learning. There is no information regarcing the cognitive effects that may result, mong undernourished children, from going to school without having had a meal after an overnight faast. Compensatory mechanism may protect cognitive fuction from the adversse effects of ow caloric intake during school hours, among children who are used to this type of feeding schedule.

- There is strong suggetive evidence that school feeding programmes in developing countries result in an increased attemdance among recipients. This increase may have signiicant education benefitts in the long run as it ensures the exposure of the stuent to the materials taught in school. There is no conclusive information from developing ccountries that school feeding programmes (breakfast or lunch) has specific educational benefits, such as improvements in achievment measures or higheer concentration.

3. SCHOOL FEEDING PROGRAMMES MYTH AND POTENTIAL
BY BERYL LEVINGER

(Basec on a review of literature and assessment of empirical evidence)

School Feeding Programmes and School Attenance and enrolment:

- A school feeding programme (SFP) operating in Dominican Republic with commodity support ffrom the USA was suddenly terminated. A sample of teachers uniformly aggreed that enrolment had been adversely affected. The effects of the termination of the programme appeared to be much greater in rural schools and for females.

- SFP in Haiti, covering 100 schools, and 936 primary school children was studied. It was noted that there was trong correlation between home environment and attendance in both SFP and non-SFP schools.

- Comparson was maade between fed and non-fed schools under fifteen programmes in Colurmbia, Kenya and the Philippines. SFP was found to be "effective on attendance" in three programres. In ten programmes, SFP was considered "probably effective on attenance." In the remaining two programmes, SFP was considered "ineffectie on attendance."

- SFPs should be carefully targetted; SFPs ar more effective in stable, poorer, rural areas; populatioon on the border-line of their development scale--poorer people amongst thosse who are about to send children to school -- are especialy likely to beenefit.

- Where the need for child labour and availability of employment opportunities co-exist SFPs are likely to act as incentive for school attendance only when the ration size is large enough for parents to view feeding as a significant income ransfer progrramme.

- Impact of any SFP is a function of the interction between the environment in which it operates and the features incorporated into its design.

- Pattern of school enrollment are very differen for boys and girls, girls' work in households being highly valued.

School Feeding Programmes and School Perfomance

- Where SFPs can be designed to have an irpact on nutritional status, impact on attendance and perrformance will be achieved.

- SFPs can reach their full potential for stimulating cognitive development only when they are developed as part of a broader intervention to address developmental lap or deficiencies in students.

- School-aged child's nutritional status exerts significant influence on his academic performance; current diet is the single most significant predictor of class-room achievement; hunger cause inattentiveness, distractability; and SFPs that are successful either in reducing a child's feelings of hunger or improving his nutritional stats are likely to facilitatee cognitive development - that is,

  * mobilisation and maintenance of attention;
  * development of sensory integrative capacity;
  * Exploratory, problem saving behaviours; memory.

4. SCHOOL NUTRITION PROGRAMMES WITH WFP ASSISTANCE: SCOPE AND SALIENT IMPACTS

Feeding Children at School

The most typical picture of WFP support to education is that of school children sitting in groups, all eagerly digging into a full plate of food in front of them. School feeding programmes at primary schools have always been the most common way of using food aid for the benefit of school children. In 1992, for example, these programmes accounted for more than two-thirds of all WFP assistance for human resource development, in many countries, school canteens have been operating with WFP support since the 1960s.

Reducing the effects of hunger

Few people would contest the fact that children must eat in order to sustain themselves during the course of a school day, whether the food is brought from home or provided by the school.

In fact in many industrialised countries school canteens are a normal part of the services provided by an educational institution. In the developing world, providing school meals is even more important. In rural areas, children often walk over long distances to come to school, many of them on an empty stomach. Amongst the poorer population groups children cannot afford to bring food from home to eat during school breaks. These children are easily distracted in the classroom, and have problems staying alert and concentrating on the lessons. Many teachers have stories to tell of children falling asleep in class and being unable to benefit from education provided to them.

This syndrome is generally referred to as "short-term hunger" and has been shown to affect children's cognitive functions and, most likely, their learning achievements (UNESCO, 1989). Several studies have demonstrated that the effects of short-term hunger are exacerbated in children who already have a history of undernutrition and are facing current nutritional deficiencies (Levinger, 1994). Children whose cognitive development during the first years of their life has been impaired by malnutrition and who live on one meal per day are more affected by missing breakfast than are better-nourished children. This, unfortunately, is true of many children in the developing world.

However, short-term hunger must not be confounded with other nutritional problems such as malnutrition, as has often been the case in the past. While short-term hunger is caused by temporary fasting, malnutrition is a much more complex phenomenon, linked, for example, to lack of safe drinking water, inadequate eating habits and parasite infection. A severely malnourished child does not feel hungry, and the very hungry child may or may not be malnourished (levinger, 1994). A school meal can only address the immediate food needs of a child and would have to be accompanied by other interventions to have an effect on malnutrition.

School Nutrition and Health

During recent years, there has been increased international discussion and growing awareness of the link between children's nutritional and health status, and their educational participation and performance.. The fact that educational development has to be concerned not only with improving the 'infrastructure' of learning (schools, teachers, textbooks, etc.) but also and foremost with what has been called the child's active learning capacity

(ALC)(Levinger, 1994) is now increasingly accepted. The ALC concept looks at problems such as protein-energy malnutrition, parasite infection, micro-nutrient deficiencies or hearing and sight impairments, wh each problem calling for different but often simple solutions. For example, it would ften be enough to seat children with hearing problems closer to the teacher, or build schols with bigger windows so that pupils can see better. Ideally, several such interventions hould be combined to enhance the impact on students' health and nutritional status. Schol feeding would thus became part of a larger school nutrition and health programme, together with, for example, deworming, health and nutrition education or provision of afe drinking water and toilets at schools. School meals can also be supplemented with certin micro-nutrients or vitamins if these are missing from the children's normal diet.

In most school feeding pr rammes, the food aid provided by WFP is used to provide students either with a snac, for example a bread roll with a slice of cheese, or a cooked warm meal. It is importa to serve the meal as early as possible so that children may get full benefit from it while ey are in class. In practice, this often poses a problem because warm meals take a lon time to cook, and snacks may be too costly when enrolment is high or the school tietable makes if difficult to serve a meal before classes start. However, efforts are made design programmes in such a way that the timing of the meal can be advanced as much s possible.

Involving Parents and Communies

In many countries, fresh vegtables or other ingredients are contributed by parents or from the produced of school gaens in order to make the meals more varied. While teachers and headmasters supervse the receipt, storage and distribution of the food, cooking is mostly done by mthers (sometimes also fathers) of students. Many communities organize themselve to share the workload and take turns in cooking. Sometimes, the cook eats with th children or receives food to take home as a kind of payment. In most school feedin programmes, parents also provide the firewood or pay for other types of cooking fuel, ad to make sure that there is enough water for cooking in the countries where the terrain difficult and schools are often located off motorable roads, parents also have to take cre of transporting the food from the nearest storage point to their school. This requires onsiderable time and often money on the part of the communities, but few parents mid the effort since they see it as being for the benefit of their own children.

To mobilize the communies, and develop their interest and involvement in the functioning of the school are important spin-off effects of many school feeding programmes. In a context whereparents are more and more frequently asked to contribute to the cost of schooling, the food rovided to their children represents an immediate benefit and compensation for their effort, and can enhance the feeling that the school serves, the whole community. At the same me, school feeding programmes can have other positive side effects beyond the immediæ nutritional relief. For example, the preparation and distribution of food can provide ie setting for practical teaching and learning experiences about nutrition, health and hygene, or for making science or social studies a more interesting learning experience Juruge, n.d.). The existence of a canteen also often stimulates the setting up of schol gardens which can be used for practical teaching of agriculture with the added advatage of providing some fresh ingredients for the school kitchen.

In several countries, school gardening has also been promoted with the idea of producing enough food to replace WFP assistance (Malawi and Lesotho, for example.) However, such operations have proven to be counterproductive to jeopardize the educational role of the school (children spending more time workg in the garden than learning). School gardening should thus be limited to its pedagogic function, with food production as a side effect.

Food aid for boarding students

While school feeding has important benefits for dastudents - walking daily to and from school - it is indeed indispensable for boarding sdents who live at the school in dormitories. Boarding facilities are necessary for studentwhose homes are too far to walk to school, either because the low population density eans that there are not enough children living in the area to warrant setting up of a schoor because only few schools are available (this applies particularly for secondary and hier education institutions). The operation of boarding homes is very costly, and feeding ually constitutes the largest part of the bill. Many governments are facing increasing prolems to meet these costs in the face of shrinking education budgets. In many countri, financial allocations to these schools from Ministries of Education have decreased draatically over the last years and many boarding schools now charge significant fees toarents, thus making it almost impossible for children from poorer families to enroll

By providing food and for feeding boarding stents, WFP makes an important contribution in many countries to keeping such schools erational and reducing boarding costs. Such support has been instrumental in countri such as Mozambique (where boarding schools were the only schools functioning durinthe years of civil war), Kenya (where nomadic children could not enroll without the exence of dormitories) and many other countries where boarding homes are the only way fchigh school students to attend a school which is often the only one in an area of several hulred square kilometers.

Improving Enrolment and Attendance

Apart from the nutritional importance of school eding, such programmes have another distinct benefit - they serve as an incentive for pents to enroll their children at school and for children to attend regularly.

In the poorest communities, where schooling hato complete with many other demand on children's time, parents know that by sending eir children to school they will be atleast get something to eat, thus saving on the family fd budget. In many countries it was been shown that without the school meal, children dro out and only come back when the food is again available. Likewise, enrolment in manschools increased significantly after introduction of school meals. Since little research h been done in this area, this is often more a general experience than a scientifically estaished cause-effect relationship. But the experience is shared widely and with strong nviction by large numbers of teachers, parents and other educational personnel who are volved in the operation of such programmes. In order for school feeding to be most effecte in this way, it is important to target it carefully to those areas and population groups were enrolment ratios are lowes and school meals most likely to make a difference.

Where food aid is primarily justified as an incentive r children to enroll and attend, it is also possible to provide it not as school meals but raer as food rations that children can take home at the end of each week or month and share ith their families. In that case,

the incentive role of the food is even higher, particularly, if commodities are chosen not for their nutritional but rather their financial value in Pakistan and Yemen, this idea has been pushed even further by designing projects where such food rations are given only to girls, in order to make a specific impact on improving their education. This was possible, however, since both countries have separate schools for boys and girls. Targeting girls only with such assistance within a co-educational school would probably create conflict among students and thus not be feasible.

Food Aid also for Poor Quality Schools?!

One might ask, of course if it is worthwhile attracting children to schools which often are of poor quality, with dilapidated buildings, little to no teaching and learning aids, and poorly trained teachers. The answer of parents is yes, because even a little education is better than no education at all. It is of course important to provide children with the best possible type of schooling. However, this requires strong commitments by governments and communities as well as co-ordinated interventions by donors. In the meantime, school meals can help increase interest in education and ensure at least some minimum schooling, particularly in disadvantaged areas where educational quality is often low.

In short, a school feeding is amongst the most beneficial ways of using food aid for education: it responds to an immediate need on the part of children and parents, it is well-liked by beneficiaries (as demonstrated by the significant contributions that parents make to such programmes); it is people-centred and benefits directly the most needy parts of the population; and it is a way of channelling food to large numbers of needy children since it operates through one of the most extensively developed social service systems, namely schools.

5. SUMMARY OF COMMENTS OF STUDY BY

NATIONAL INSTITUTE OF NUTRITION, HYDERABAD

1. The MDM programme as the name implie should provide one additional meal at school in addition to the meals usally consumed by the child at home every day bridging the nutrient ga that exists in their dietaries. The NNMB surveys show that average inkes of energy and protein by children between 7 and 10 years, are 1170kcal and 30 g; while in 10-13 years age group it is 1400 kcal and 37 g rspectively. Thus the gap, on the average, works out to be 750-800 kcalof energy and 3 to 5 g protein as the RDI for this age group (boys andgirls combined) suggested by ICMR is around 2000 kcal of energy (199 for 7-10 years and 2400 for 10-13 years) and 40 g of protein. This wold mean that the school meal, in principle should ensure at least 750 kca Supply of calories based on cereal pulse mix will automatically bridgethe protein gap. The present study, however, showed that the meal suplied to children, under the scheme provided just around 300 kcal, which is hardly 50% of what precisely is the basic need. Therefore, thenutritional benefits cannot be spectacular and the results seem to vindicat the same.

2. Analysis of anthropemetric and clinical da have shown that nutritional status of the children in schools covered y the programme in most of the States are relatively better when compred to children in non-MDM schools. The proportions of malnourishe children in terms of weight for age or waterlow's classification wer less in MDM programme schools than in non-MDM schools. The roportion of normal children or children in better grades appeared tc be higher in the States of Tamilnadu, Gujarat and Kerala and no comparisons could be made as baseline date was not available and the programme was universal.

3. The meal programme, infact, was introdued for obtaining educational (non-nutritional) benefits. Since there is a lot of emphasis in recenty years to improve the literacy, in general, the enrolment of children in most of the States has increased considerbly. The role of MDM on enrolment is difficult to pinpoint. Howeer, comparisons of retention rates and drop-out rates between MDM ad non-MDM schools showed a favourable status in MDM schools. Impct on scholastic performance though based on crude criteria, suggested psitive impact in most of the States. The educational benefits became more discernible while the regularity of the supplementary feeding wastaken into account in various States.

4. The pattern of operational difficulties obseved in the present study was in no way different from what was seen enerally in earlier evaluation studies of several 'supplementary feeding programmes in the country.

The constraints of ie inputs were short supply of food, interruption and inferior quality offood (occasional), lack of transport, inadequaute facilities for storin, cooking, low contingent and honorarium amounts etc. In addition it as also observed that there were alteration in mode of implementation f the programme as seen in the State of Gujarat viz., replacement of dry ations instead of cooked food and in Karnataka, viz. alternating the progamme in rural schools and town schools on yearly basis. The threat f CARE withdrawing the support for the programme was visible in the tate of Orissa and Andhra Pradesh. Implementation of a uniform policy t National level is probably required.

5. Not withstanding sme of these problems, the results of the present study indicate that the pgramme is not without benefit. It has immense potential to improv the nutritional as well as the educational status of children provided th programme is strengthened by increasing the inputs and removing the btlenecks observed.

6. EXTRACTS FROM 'IMPROVING PRIMARY EDUCATION IN DEVELOPING COUNTRIES' BY MALAINE E. LOCKHEED, ADRIAAN M. VERSPOOR AND ASOCIATES (1991)

Nutrition: Several studies have explored the rationship between children's nutritional status and school indicators such as age . enrolment, grade attainment, absenteeism, achievement test scores, general mteigence, and performance on selected cognitive tasks, including concentration in th classroom. Three aspects of nutritional status affect achievement adversely: protein-energy malnutrition, temporary hunger, and micronutrient deprivation.

Protein-energy malnutrition is generally cause by a deficient diet, may be exacerbated by the child's parasite load, and is most always accompanied by poverty. All nine of the studies reviewed by Pollit (1990) reported a significant relationship between protein -energy nutritional stats and cognitive test scores or school performance in China, Guatemala, India, Kenr, Nepal, the Philippines, and Thailand. Consistently, past and present nutritional tatus (as captured by height-for-age and weight-for-height data, respectively) wasnked to higher cognitive test scores or better school performance. Taller children ere also likely to be enrolled in school earlier than shorter ones.

One study found that Kenyan children who werecomparatively well nourished and higher composite scores on tests of verbal comphension and intelligence than children who were less well nourished (Sigman ancothers 1989). Furthermore, better-nourished females were more attentive durinclassroom observations than malnourished ones. For the children as a group, th best predictors of cognitive scores included food intake (current nutrition) anc physical stature (nutritional history). Regardless of the family's social and econmic resources, children with more adequate diets scored higher on the cognitive tttery than those with poorer diets.

4 Similarly, in the Philippines, pupils with ood nutritional status had significantly higher academic performance and mentaability than pupils with poor nutritional status, even when family income, school uality, teacher's ability, and mental ability were controlled (Florencio 1988). Althugh the relationship between health and nutritional status and academic achievemet varied by grade level and subject matter, a significant positive relationship linkd nutritional status to mental ability and academic achievement.

5. Children who are temporarily hungry - typidly a result of not eating breakfast - are generally more easily distracted from heir school work than those who have eaten (pollitt and others 1983). Providing :hool breakfasts to Jamaican primary students significantly improved attendance ad arithmetic scores, but not spelling (Powell, Grantham-McGregor, and Elston 198). The reason might be that the two subjects require different problem-solving skil; spelling is learned largely by rote, while arithmetic requires the application of nes to novel situattions. The

presence or absence of breafast affected achievement in schools with food programmes, but not in the control group (Cottem 1985). This may be a consequence of proper targetig: students in the schhools with food programmes were perhaps at higher nutritinal risk than those in the control schools and thus more susceptible to the demanc imposed by temporarry hunger. Differences in the causes and manifestations of tenporary hunger and protein energy malnutrition are important. Temporary hungermay be an educational problem for otherwise well-nourished children, but the effct of hunger is short-tterm and generally disappears when the hunger is satisfied.

6. Three micronutrients genrally affect scchool peerformance: iodine, iron, and vitamin A. A study of school-ge children with endenmic goiter in Bolivia, and the effect of orally administered iodized oil on their intelligence and growth, indirectly supported the notion that correting iodine deficiency i improves mental performance (Bautista and others 1982). Another study examined tthe effect of iodine deficiency on mental and psychomotor ailities in Indonesian chhildren and found significant cognitive performance differenes among nine to twelve year olds and similar but not significant differences amng six to eight year olds (Bleichrdt, Drenth, and Querido 1980). When eductional backgrround waas controlled however, few significant differences were reprted. Research in Javaa showed tha iodine-deficient children over the age of nine erformed less well onn tests of intelligence, motor skills, concentration, perceptio, dexterity, and responnse orientatior than a matched iodine-replete population (Querdo and other 1974).

7. Iron deficiency is likely o affect a child's alerrtness, whicl in turn affects attention and learning (Pollit 1990). Iron deficiennncy also impairs the higher cognitive processes, such as coceptual learning, of pree-schoolers (Popkin and Lim-Ybanez 1982). Pediatricians ften describe iron-deficcient children as irritable and uninterested in their surroundings, which inhibits their response to earning stimuli. Although apparently less attetive to environmental clues that facilitate problem solving, iron-deficient childrencan, once they learn a task, process the information as well as iron-replete children pollitt, Haas and Levittsky 1989). Their motivation to persist in intellectually chaenging tasks may be lowered, hovever, and their overall intellectual performanc diminished (pollitt, Haaas and Levitsky 1989). Iron deficiency also seems to prodce behavioral changes that stem from altered brain functions, although the mechansms related to this phennomenon are inknown.

8. Vitamin A deficiency hallong been associated wwith nutritional blindness and severe cases of measles. Althogh total blindness geneerally precludes children from participating in primary schol, lesser vitamin A deficiency can impair their academic performance by inceasing night blindnesss and limiting their field of vision (especially peripheral vion). Vitamin A deficiency has recently been linked to morbidity and mortality cased by diarrheal and respiratory disease, even in children without clinical sign of the deficiency (Scommer, Kat, and Tarwotjo 1984; Tarwotjo and others 187). Vitamin A defficiency also affects growth, including brain growth, whichcontinues until the agees of seven tc ten. Although studies of how Vitamin A deficiency affects ggrowth and morbidity have

concentrated on pre-school children, the same could be expected for school children.

9. **Other Health Conditions:** Persistent illness that contribute to repeated absence from school, heavy parasite loads (which contribute both to school absences and to malnutrition), and hearing and vision impairment adversely affect school learning. Children who aree excessively absent frm school tend to perform poorly and drop out prematurely (Weitzman 1987). Absences can be caused by diarrhea and abdomina pain induceed by parasitic infectins; parasites can also adversely affect childrens growth andd other indicators of ntritional status. The impact of hookworm of school achieevement and the mentl development of children was studied in the United States and Australia at the tun of the century. Although their statistical methods do not umeet current standards the studies found that children infected with parasites did not perform as well as other children either in school or on a battery of psychological tests, including tes of general intelligence (Pollitt 1990). Infected children allso sufferd from inattention and limited persistence at school tasks. Children wvho had been dewormed made significant and large improvements n performancce on all but IQ tests. Vision and hearing problems also place children at significant educational risk. Chilren who sensory skills limit their exposure to classroom stimuuli cannot be expecte to receive optimal benefit from schooling.

... ...

10. **Malnutrition:** In devveloping countries, malnutrition is often endemic. Conditions of particularly hiigh prevalence inlcudeprotein-energy malnutrition and micronutrient deficiencies (Ashworth 1982; Pelle 1983). A synergistic reaction between protein-energy malnutrition and infectio has been reported in several studies (Chen and Scrimshaw 1983). Temporry hunger is also undountedly widespread in both industriaal and developing nations, although data on prevalence are not availatle. Essentiaally, temporary hunge is associated with short-term fasting, most typically when children do not eat brekfast.

11. Within the developing vworld, protein-energy malnutrition is the most prevalent nutritional problem. Epidemiological informatio on protein-energy malnutrition among school-age children is relatively scarce (pllitt 1990). However, studies conducted in China, India,., Kenya, Nepal, and the Philippines confirm that malnutrition is pervasive, particularly among poor rural populations (Agarwal and others 1987; Jamison 1986;; Moock and Leslie 986; Sigman and others 1989; Tragler 1981). In Kenya, for example, more than 0 per cent of children in school were stunted and underwight,, while in Nepal the proportion of boys below the 75th percentile of wight for age (a measure reflecting urrent status and prior history) ranged from 59 per cent (sixx year olds) to 84 percent (ten to eleven year olds). Only 13.5 per cent of the Uttar Pradesh, India sample had normal heights and weights for their agees.

12. Micronutrent deficiencies (depletion of the bdy's store of various nutrients) are another widespread phencomenon in developing nations. Iron deficiency is the most common poblem in maany areas, afflicting an estimated 680 million people in

Asia, 60 million in Africa, million in Latin America, and putting them at risk for related disorders (such as goiter, endemic cretinism, psychomotor and intellectual retardation, and impaired renal function) (Hetzel, Dunn, and Stanbury 1987). Among children between five and twelve, the prevalence of iron deficiency is estimated to be 49 per cent in Africa, 6 per cent in Latin America, 22 per cent in East Asia and 50 per cent in South Asia (Pollitt 1990). Where it is prevalent, iron deficiency anemia is generally attributed to the lower intake of dietary iron and chronic blood loss due to hookworm, malaria, and schistosomiasis.

13. Although data on the incidence of vitamin A deficiency have mostly been collected for preschool-age children, the scattered data on school children suggest that the problem is significant. For instance, in the Indian State of Uttar Pradesh 4.1 per cent of school children had ocular signs of vitamin A deficiency, which indicates an advanced condition. In Ethiopia 4 per cent of school children were affected by night blindness (Agarwal and others 1983; FAO 1986). Data from Tanzania show that two decades ago 17 per cent of school-age children had dangerously low levels of serum vitamin A (FAO 1987).

14. **Other Health Problems.** Two other important health problems plague school children in developing countries: parasites and hearing and sight impairment. Helminths (Ascaris, Trichuris, and hookworm) are highly prevalent among school-age populations in developing countries, although precise estimates of pervasiveness have not been made. The profound effect of helminthic infection on health and nutrition suggests that infected children are at serious educational risk because of unfavourable biochemical changes, altered immunological activity, and structural changes in organs such as the intestine and liver (Pollitt 1990).

15. Another parasitic infection that affects about 200 million individuals throughout the world, many of them school-age children, is schistosomiasis. This disease causes systemic changes, has pathological consequences and adversely affects nutrition. Clinical features of the disease at its various stages include fever, weakness, lassitude, muscular pain, nausea, vomiting, diarrhea and fatigue (Pollitt 1990). Despite the lack of conclusive research, there can be no doubt that schistosomiasis impedes school attendance and achievement.

16. Many school children also have impaired sight and hearing, given the relationship between sensory function, on the one hand, and infection and nutrient intake, on the other. No comprehensive data are available for primary students, but a study in the Philippines revealed that 6-7 per cent of those tested were visually impaired (Florencia 1988). This study also found the highest proportion of students with poor eyesight in the first grade. The percentage of children with normal vision increased as the grade level rose. This suggests that children with poor eyesight may drop out of school or repeat a grade at higher rates than their schoolmates with normal vision. Indeed, mental ability and visual ability were the two most robust predictors of academic achievement for the sample studied.

17. Hearing acuity was also examined in the Philippines. 13.5 per cent of students had some degree of impairment. Hearing loss may be linked through

subclinical hypothyroidism to mildd iodine deficiency (Pilli 1990). In China, Yan-you and Shu-hua (985a, 1985b)) found that the mean level of hearing for school children in an iodine-deficient, remote area was significantly power than that of a comparison group of children. After three years of iodine supplementation, hearing differences between the groups disisappeared.

... .

18. **Promising avenue: Nutritional interventions:** Treatment of protein-energy malnutrition, temporary hunger, , and micronutrient (pecially iron, iodine, and vitamin A) deprivaion can be efficiently undertaken in school. Supplementary feeding is the most commonly applied intervention to treating protein-energy malnutrition and tenporary hunger. while iron, iodine an vitamin A supplements and deworming are the prevalent t treatments for micronutent deficiencies; all can be easily administered in schools.

19. Modest school snacks or breakfasts alleviate short-en hunger and its adverse impact on emotional behaviour, arithmetic competence, eding ability and physical work output (Pollit 1984a, 19884b). The study of breakfast programmes in Jamaican schools supports this notion (Powell, Grantham-McGregot and Elston 1983). Although the cost is high, the benefits may be high as well, especially for nutritionally deprived students who are confronted with complex cognitive tasks (such as arithmetic) early in the day.

20. Supplementing iron, iodine, or vitamin A should be given a high priority where deficiencies of these micronutrients are prevalent. Regardless of the treatment (fortification, supplementation, or deworming) reducing iodine, iron, and vitamin A deficiencies is particularly cost-effective because the learning deficits related to them are both serious and reversible (Pollit 1990). Supplementation reduces several associated conditions that impede learning. Cost-benefit ratios are favourable, benefits are sustainable, and targeting is relatively simple. Absorptive capacity and infrastructure requirements exist but are not onerous. Iodine can be supplemented inexpensively. A dosage can be administered once every two years at a cost of $0.12 per child with minimal risk of toxicity (Unesco 1989). As a long-term measure, however, fortification may be preferable to supplementation. Areas where iodine deficiency is prevalent can be readily targeted, which significantly increases the likelihood that children who are at risk will receive supplementation.

21. Iron supplementation for reducing anemia (which is however, inappropriate in areas where malaria is endemic) is highly cost-effective, with a benefit-cost ratio substantially greater than 1. Levenn (1985) studies three countries and found that the benefit-cost ratio for dietary fortification to be between 7 and 70; the ratio of dietary supplementation ranged from 4 to 38. These benefits apply, however, not to educational outcomes, but to future earnings.

22. Vitamin A supplementation is effective, easy to administer, and inexpensive. A 75 to 80 per cent reduction in the prevalence of vitamin A deficiency has been repeatedly associated with the universal distribution of vitamin A capsules (Berg and Brems 1986). Distributing vitamin A capsules in Indonesia twice a year reduced

overall child mortality b one-fourth to one-third d (Sommer Katz, and Tarwotjo 1984). The cost of a massive dose of vitamin A irin a capsule is low, about $0.05. Since students need to igest them only twice a year, this inervention does not infringe on the teacher's thr duties.

23. **Blind Alley: Schol Lunches:** Providing school luches, rather than breakfast or snacks, is oquestionable value. Such feeding programmes are rarely designed to meet nutritinal goals; more often they are designed to off-set the negative effect of hunger and undernutrition among preschool and school-age children, improve attenance, and transfer incomme to the poor. Only a few statistically sound studieshave examined the effect t of school luch programmes on enrolment and achievemnt and the available annalyses fai to conform a clear relationship between scbo feeding and educaticional resuls. Ample evidence suggests that school fediig programmes improove attendance (which may be beneficial to school perfcmance), but this improveement may be a function of their impact on transferring inone to poor families rather than of her nutritional value. Assessments of the long-trn benefits of school lunch programmes have, in general, failed to yield statistical/ neaningful findings onn the improvement of nutrition. This may be because theyoperate a relatively smallder number of days (seldom more than 150 per year), food s ubstituted at home, ratitions are diuted at school, or the programmes are poorly arjeted (Levinger 1983).). In partcular, protein-energy malnutrition cannot be tated in the days availablele for schol unch programmes, and those programmes d mt improve nutrition enough to varant their relatively high cost.

24. The logistical demns of most school lurnch programmes create further problems. Although tajeing is easy, ensuring ; that food raches the children targeted and is not subitted by other food is ; frequently a problem, and the dilution of rations often niigates the impact of tatargeting wthn schools. School lunches also require a wd-eveloped infrastructuree. Providiig school lunches is a relatively expensive inteveition even when the f food and ther commodities are donated; teaching time isos as well.

7. EXCERPTS FROM EVALUATION OF THE 'IMPROVED MDMP' IN GUJARAT BY TARA CONSULTANCY SERVICES (1994)

RESULTS OF THE FOCUS GROUP INTERVIEWS

Focus Group Interviews (FGIs) were guided group discussions with government officials implementing the programme, principals, teachers, parents, and the school children before the School Health Inputs Programme started. The purpose was to elicit opinions on the intended programme. The MDMP officials opined that most of the children suffered from worms and nutritional deficiencies. Many children stated they passed worms, felt tired, and could not see properly in failing light. Parents were generally not aware of such problems in their school-going children. All (Providers && Receivers) were very positive about the intended programme. Principals, teachers and parents said they would help in the Dosing Rounds and would see to it that the tablets/golees were consumed.

RESULTS OF THE PROCESS & EVALUATION

The MDMP Commissionerate worked very hard from early 1994 to make the School Health Inputs programme a success. It procured the necessary tablets of Albendazole (400 mg), iron (60 mg elemental iron, and vitamin A capsules (200000 IU) to cover nearly 30 lakhs primary school children in the 19 districts of Gujarat. Iodized salt was used routinely in the cooked meals. The pharma companies transported the inputs to the district or taluka where the district and taluka health officers were very cooperative in storing the medicines. Thereafter the officials and Organizers of the MDMP collected their quota and dosed the children as prescribed by the Expert Technical Committee set up by the MDMP. The chain-method of the Chief District Health Officer training the Deputy Collectors and Mamlatdars (dosising/benefits/transient sic effects), who in turn trained the Organizer, who in turn trained the Helpers/Cooks was found to be highly cost effective and efficient. The procurement, logistical delivery and receipt by the school children ranged from 90-100%. Since the stocks were relatively small, they could even be conveniently stored in the Principal's Or Organizer's lockable office cupboard. The shelf-life of the inputs were also well beyond 2 years. Hence, provided they were kept in a dry and cool (for vitamin A) place, they were absolutely safe for further use. What was very commendable about this programme was the enthusiastic acceptance by the Providers (MDMP Commissionerate assisted by State Health Department, State Education Department, and some voluntary agencies) and the Receivers (the Schoolers). The Community, Parents, Principals, Teachers and the Schoolers were all for it.

RESULTS OF THE STUDY ON PREVALENCE AND SEVERITY OF INTESTINAL PARASITIC INFECTIONS

Nearly 75% of the Schoolers in slum Baroda were infected with Protozoal (E. histolytica) infection and/or helminthic (round worm) infetions. The former was about 50-55% and the latter 22-25%. The infections were mostly severe to

moderate. There was efinite negative impaact among Infeced Schoolers (6-15 years) who were on an verage 2 Kg lighter r and 3 Cm shoter than their non-infected counterparts. Te average hemoglobibin levels of infeted schoolers were 10.4+.09 g Hb/dl vs 11+.18 g Hb/dl in thee non-infected. This negative impact was still worse among th older boys and girls s (11-15 years). The findings clearly indicate that blanket deworming is a must f for these undenrivileged schoolers whether or not the State is a MDM programmme.

THE RESULTS OF TE BEFORE' AND '.'AFTER' IMPACT EVALUATION ON 1000 RURAL AND URBAN BARODA SCHOOLERS (615 YEARS)

Since the Process Evaluation had shown extremely effective and efficient management in procurem, logistics, trainingg and distributio, a positive Impact could be predicted. Th results on 1000 reppresentative schoolers chosen from a Municipal School in Brola city (500); Kanarjan Taluka (25); and Jetpur-Pavi Taluka (250) show a reakably positive impact among these Schoolers who had received the Health inpu dosing round (intervention of one school year)

The 'Before' and After' picture are deppicted in bar graphs (Figs1-5). Older children who were affeed more, benefited nmore than the younger ones. Dosed children showed the follwing improvements:

- They were oar average 1.1 kg heeavier and 1.1 cn taller than undosed children.

- Hemoglobin alues on an average were 1.8 g Hb/dl more than before. Average Hb vels were 12.4 g Hb/dl in the 'After' ituation.

- An excellentreduction in intestinnal parasitic infctions was achieved from 71% to 9%.

- Greatly redued prevalence of nightit-blindness and e'e signs of vitamin A deficiency i.e from 67% to 34%.

- Many dosed hildren stated they feelt more active aid could see better in dim light.

- The worm iesed children were greatly relieved tobe rid of worms.

BASIS FOR GIVING HESE HEALTH INNPUTS

Global as well asnational studies have confirmed that Low Income Groups (LIGs) have most seve dietary deficits of iron and vitamin A - not calories or protein. These LIGs e also the most heavily infested wih intestinal parasites which greatly interfere ith growth, iron and vitamin A status Although Gujarat is not an endemic area ir iodine deficiency disorders, the Districts of Surat and Bharuch are. It is higly necessary that all population segnents use iodized salt only.

It has now been conclusively shown that eworming, iron and vitamin A supplementaion studies muust be done as Hb package'. The reason is that deworming ielps in keeping up Bh levels for 3-4months. Adequate dietary iron is most necesary for the schoooler's cognition anoability to perform hard physical labour. Vitmin A apart froom being the Eye Vitmin' is also linked with common morbidities, especially of thee Upper Respiratory Tract (URI). This in turn could lead to mor school absenteeiism. Iodine deficien, even if mild, affects learning.

Last out not leastt this 4-in-one-pacige would only cost about Rs.15/schocer/year while the MDM would ost about Rs.300/Schooler/yer. However, the ideal would be to give both.

PRIMARY SCHOOL EDUCATION AN THE MID-DAY MEAL PROGRAMME

The Government of Imddia (GOI) places Universal Primary School Education very high on its National Aggeenda. 110 districts in 9 States of India have started on the District Primary Educattidon Programme from 1994. The 9 States are Andhra Pradesh, Asam, Haryana,, Karnataka, Kerala,Madhya Pradesh, Maharashtra, Tamil Nadu and West Bemggal. However, it apears that no provision has been made to ensure a basic miniimmum for school healt The GOI & GOG have to pay equal attenton to the 3 legs of the tripod. Thesare : (i) Infrastructure (buildings & teachers) (ii) A relevanit curriculum, and (ii An "Actively Learning Child". Educability should go hand-i-in-hand with Educaon. Primary School Education cannot succeed unless we have "Actively Leaiing Children". The GOI has recently constituted the natiomnal nutrition council f India which will be the highest national planing and policy making body in Nuttion. The Council is chaired by our Hon'ble Prime Minister. the Hon'ble Minist of Health, GOG is a member of this Counci. The Council will meet shortly in New Delhi for its first meeting. This would be the most appropriate forum to makknown Gujarat's success story in School Healh.

FIG ONE: MPROVEMENT IN I WEIGH"
OF SCHOLERS (6-15 YEARRS) WHC
RECEIVED)EWORMING, IRON && VITAMN A

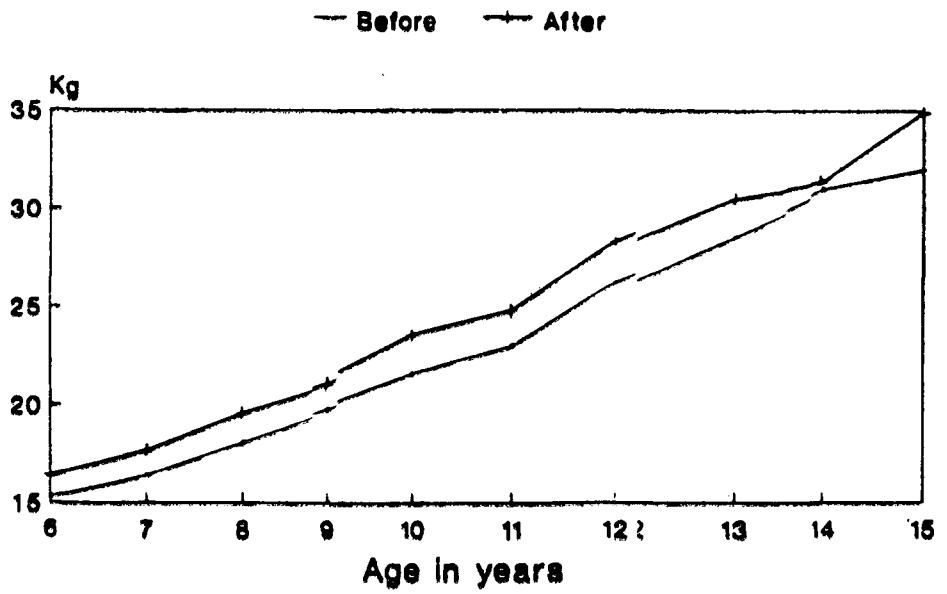
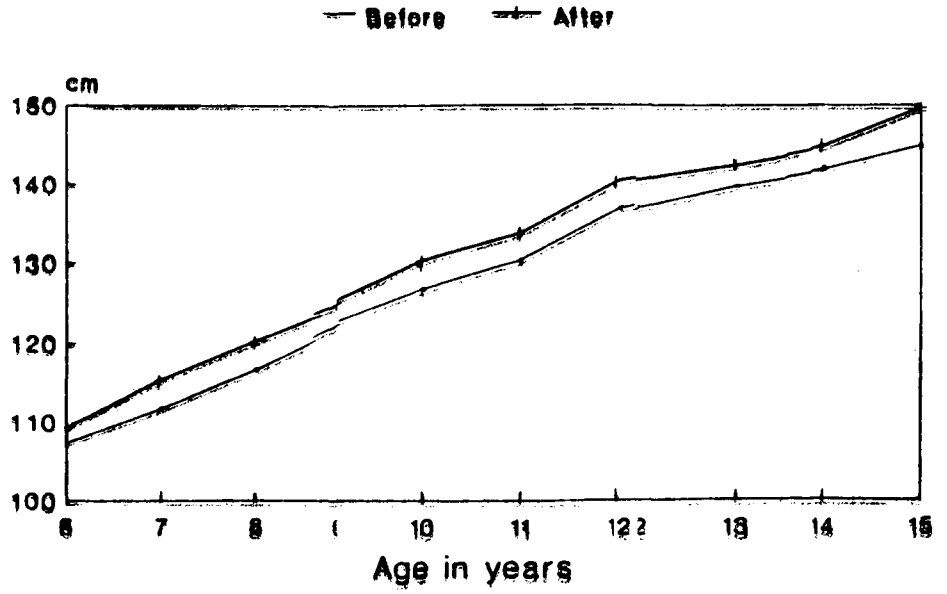


FIG TWO IMPROVEMENT INN HEIGHT
OF SCHOLERS (6-15 YEARRS) WHO
RECEIVED DIWORMING, IRON && VITAMN A



FG THREEE: IMPROVEMENT INHEMOGLOBIN STATUS OF SCHOOLERS (6-1 YEARS) WHO RECEIVED DEWORMING, IRON & VITAMIN A

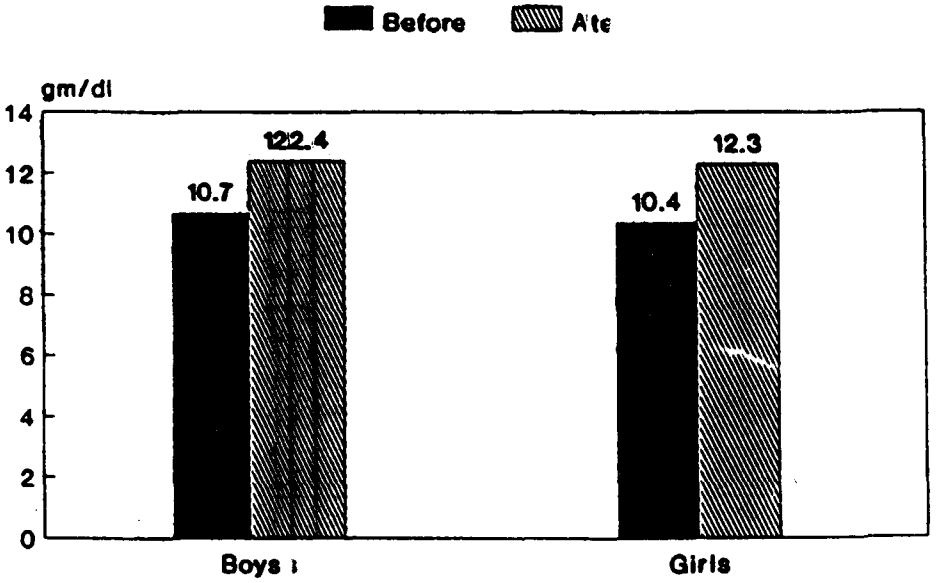
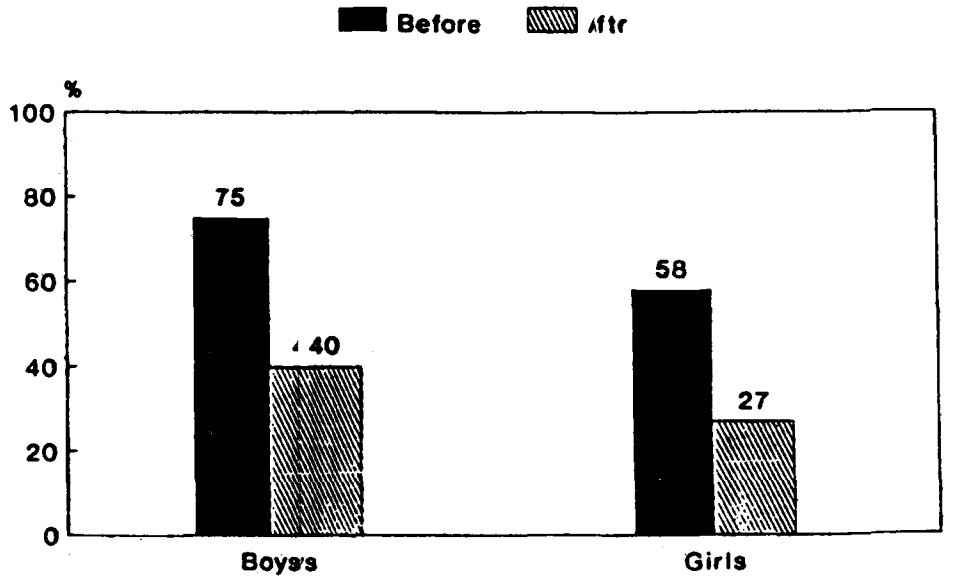
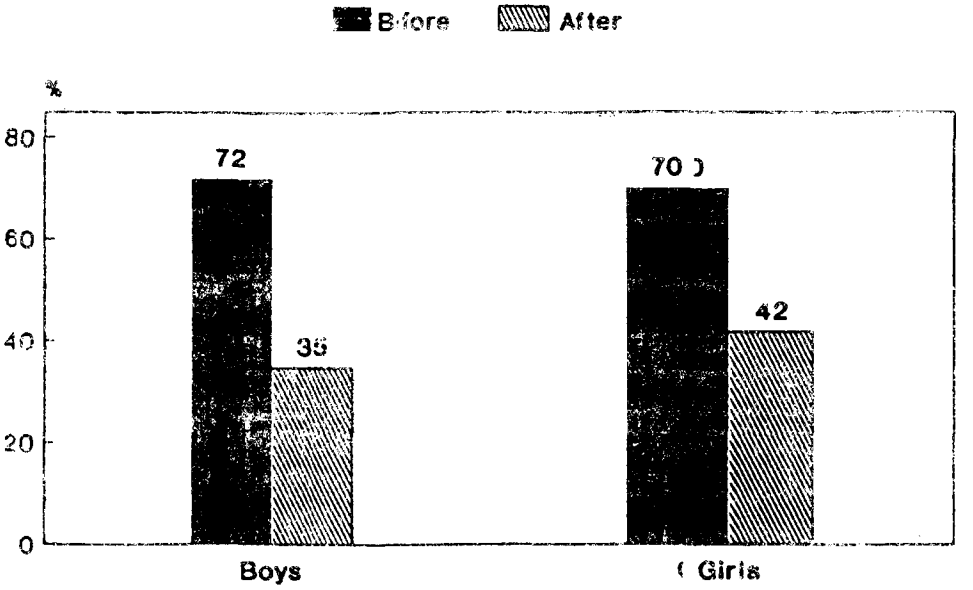


FIG FOUUR: IMPROVEMENT IN VITAMIN A STATUS OFF SCHOOLERS (6-1 YEARS) WHO RECEIVEDD DEWORMING, IRON & VITAMIN A



(Ocular signs of Vitamin A deficiency)

FIG FIVE : IMPROVEMENT IN INTESTINAL PARASITIC STATUS OF SCHOOLEERS (6-15 YEARS) WHO RECEIVED DEWORMMING, IRON & VITAMIN A



ANNEXURE-III

MID-DAYY MEAL PROGRAMMS: STATUSS NOTES FROM STATS

1. BIHAR

THE PRESENT PROGRAMME : ON MODALITIES O: MPLEMENTATION

a) Numbers-Districts/Blocks/s/Schools/Children -

Districts-41, Charrwana Schools - 119, Chilren-23800

b) Identificatioı of target grooup

Worcing Children ı

c) Food Compnent - Pre-Processed food or cokd food or supply of material to purents

Coolec food

d) Implementinı Agency

Education Department throough District Administntin

e) Role of locıl bodies - : Z.P. Municipalities, Gım-Panchayats, Village Education Committees

Nil

f) Community Support

Nil

g) Linkages: Wih ICDS

Nil

h) Infrastructural Support: At t school level additiona hed, utensils, store room etc.

Additoral shed pprovided under JRY and Utensils have been provicec

13—209 Deptt. of Edu./95.

i) Additional staff for programme at state, district, block and school level

Nil

j) Financial outlay of the programme on various sub-components

i) On maragment - Rs.910/- per school per month
ii) On infrastructure-Rs.6600/- peer school per utensils
iii) On food - Rs.27000/- per school per month for 200 children 2 days at the rate of Rs.5.40 per chid per day

k) Monitoring mechaism

At block level by B.D.O., District level by District Magistrate and at the state level by Director, Primary Education, Departmental Secretary/Chief Secretary

l) Evaluation of the programme, if any

Not yet

m) Problems in implementations

Shortage of the availability of funnds

2. GUJARAT

Introduction

1.1 A Scheme for the provision of cooked mid-day meal (comprising wheat/rice, pulses and vegetables) on each working day to children in primary schools run by the State Government and local bodies was introduced in November 1984.

The primary objectives of this scheme are as follows:

1) Providing mid-day meal to the children in primary schools to supplement their diet and raise the standard of nutrition of the primary school children and thereby also to help in the poverty alleviation efforts of the State. The meal is so arranged that it contains wheat, rice, pulses, vegetables, etc., approximately weighing 160 grams and it is designed to provide about 450 calories of nutrition per day per meal.

2) To prevent drop-out of students from schools, which is prevalent specially in the rural areas and also to serve the dual purpose of attracting more students to the school and improve their general attendance level.

3) To generate employment, specially in the rural areas through the recruitment of organisers, cooks and helpers to run the scheme in each school.

4) To help and monitor the requirement of health and nutritional standards of the growing age group of the primary school children.

5) To constitute a step towards social and national integration right at the primary school level amongst the students benefitting from the scheme.

Review of Progress

Coverage of the scheme : and identification of target groups and modalities of implementation. This scheme has a universal coverage and applies to all the primary school children whether under the State Government or run by the local bodies except the Ashram Shalas which are run by institutions on lodging and boarding basis already. The mid-day meal is being served to about 27 lakh beneficiaries per day all over Gujarat through over 20,000 mid-day meal centres which are based mostly in the primary schools (Classes I-VII), in the urban areas the group of primary schools have combined under one centre in Municipal Corporation. Each centre is entrusted with one overall supervisor, "organiser/sanchalak". Each Saanchalak has a cook and helper under him. It is estimated that a total centre level staff is about 80,000. Out of which about 52,000

or more than 60% are fenles and specially of the c category of poor deserted women and widows. Out of 8000 the number of Sanchalaks or organisers are about 25,000. These people rn the mid-day meal centrtre in the prinary school without any other assistance fromthe teachers, etc and are ɜ paid for ther part time services in the form of honorariurat the following scale

	Rural areas	I Urban areas (Corporation area)
	Rs.	Rs.
Sanchalak	300	975
Cook	150	525
Helper	100	315

The difference bween the compensation ı scale betwen rural and urban areas is due to the fact at in rural areas each prrimary schols are scattered and each school caters to a liiited number of about 1225-200 boys per school. While at the urban centres the cooing is done for 20 centres:s or more catering to the needs of a large number of studen by one Sanchalak at a paarticular centre. All these people ranging from Sanchalako helpers are purely orn temporary basis and they are generally appointed frontime to time after obtaiining a writtn undertaking from them that they would noclaim any continuity in ɜ service. They are given a break during summer and winr holidays for which theey are not pad anything. On an average in the entire yeathe mid-day meal is calcculated to rur about 180-200 days unless there is a major nanal calamity factors, epiiidemics, plagies, etc.

As such within th scheme there is no speciiial target grop based on social or economic backwardnessout like SC/ST, OBCs, , etc and it is meant to benefit primary students of the etire State.

However, in reaty certain facts and figuures may prve to be interesting reading in the entire Stæ registered primary schhool students are about 58 lakhs. Average attendance of stdents in a schools is to tthe extent of bout 43 lakhs. OUt of this students who remn present in the schools ɜ about 27 lakls students (63%) are taking advantage of the ɔheme. Again within thee State of Gujarat Saurashtra area about 49% students arebenefitting while in Nonrth Gujarat, Central Gujarat and South Gujarat the figure are 49%, 76% abd 75%% respectively. Hence the scheme is more popular in cenra and south Gujarat rrather than Saurashtra and north Gujarat. Out of these beficiaries the number of f SC students were estimated to be 3.32 lakhs or 12.58% ad hat ST are 6.23 lakhs ɜ (24%). Whle the other students comprise of 16.85 lahs (63.82%) in the triribal sub-plan areas, where the programme is comparatrely more popular 87% (of students vere already enrolled are taking benefit of th scheme. Thus in the ɜ State about 37% of the students belong to SC and ST. This figure does not incclude the Otier Backward Clases (OBC), but they constitte a sizeable number of rremaining beneficiaries. The State Government spend abou 83 crores on the scheme ɜ out of whici about 22.88% goes on honorarium, salaries nd other administrative eexpenses. Apart from this about 4 crores are spent on proding supplmentary therappeutic medicnes like vitamin 'A'.

Iron and ant-intestinal wwork tablets. The Govenment has laid down an average parameter o Rs.1.50 perr meal per boy as follos for wheat, rice and pulses 80 paise, for spces vegetableles, sugar, etc. 45 paise wich includes cooking oil and fuel and 25 paiseas componennt for honorarium to the anchalak, etc. But in reality the cost of provding 160 graams of food and vegetaes having a calorie value of 450 comes to about Rs.1.90 p per beneficiary per da The 160 gms as provided per child per ca is detailed asas follows:

1.	Vheat or joar, , bajra, maiz, etc.	50 gms
2.	Rice	30 gms
3.	Pulses	20 gms
4.	Cooking Oil	10 gms
5.	Vegetables andd condiments	50 gms
		60 gms

The Health Depanrtment arranges to meically examine the children in primary schools periodicalally, assistance of medic association and other voluntary agencies is enlisted for thhis purpose. This schee is being implemented by the Government through Colllectors and District Maistrates at the district level and through Muicipal Commmissioners in the Munipal Corporation areas. Each Collector and Municipal CCommissioner is helped y a Deputy Collector alongwith the staff and totally aboutt 1200 people are emploed in its implementation which includes the post of Commnissioner mid-day meal athe State level and his office.

Distributionof supplemeentary nutrition:

From 1994-95 a uunique scheme of distriuting three types of therapeutic medicines was introducedd in the State to supplaent the government's nutrition efforts. Accordingly alpoandazol tablets which ae meant to flush out intestinal worms, Iron tablets to iincrease the haemoglobi specially among the growing female childen of the rurral areas who suffer fro anaemia and overall weakness and vitamin A' which impproves eye sight and cocentration, cures night blindness and other deiciencies, weere introduced to cover 250,000 children at one go. This involved an all out effort t to train the teachers andSanchalaks in how to administer the doses of medicine andd also for their safe preervation and maintenance. An impact evaluation study hhas been undertaken by well known voluntary agency established inBaroda and con their limited study bas in the districts of Ahmedabad, Baroda and Rajkot, they hhave opined that the mdicines had a visibly betterment impact on the children's hhealth and it was also prving popular among the parents of the children. In the lonpg run it may prove a fuher attraction for the children to attend the school.

In this programme, , through various Goverment resolutions Government has enlisted the cooperation of f the Presidents, other fuctionaries of the local bodies at various levels, like districtt panchayats, taluka parhayats, municipal corporations,

municipalities and village panchaats. Committees have been set up at the village, taluqa and district levels.

In Gujarat under the mid-day meal scheme a Childdren Welfare Fund has also been constituted under the provions of public trust andd it is headed by the Chief Minister himself. The Fund take up the work of childreem welfare and supplements the efforts of the State Govement to build school rooms, provide utensils, mattresses to the school childreand such other activitiees which are connected to mid-day meal programme.

Mechanism for monitoring andevaluation:

In order to have strict suervision and control onn the implementation of the scheme it has been laid down bvarious Government GRs that regular inspections should be undertaken right fro the district Collectorr/Municipal Commissioner levels to Education Departmenlnspectors, Deputy Ccolllectors, Mamlatdars, etc. Inspections are also undertakn by the State leveell offices of the MDM Commissioner. Various inspecons forms have been eevolved and regular checks are made and specially from thview point of the propeer utilisation of foodgrains and medicines their maintenanceand perservation keepinngg up of hygienic conditions and proper keeping of account of the materials. Coollectors also send monthly reports in prescribed proforma cvering all the salient feaattures.

Food for Education scheme:

After their victory in te recent Assembly eleecctions in Gujarat the new Government as promised in thir election manifesto has promised to introduce alternative scheme of "Food Fr Education" in lieu oof MDM scheme. In this shceme it is proposed to give abut 10 kgs. of wheat peer beneficiary in the primary school provided they have 70% attendance, based on a certificate given by the school Principal. If this schee is introduced the neeeed for employing staff like Sanchalaks, etc. will be done way with and also coookking of meals at the school premises can be dispensed witl Earlier during the sshort period during August, 1990 to December, 1992 this scheme was put intoo force by the then Janta Government. It did not cover ne entire primary schoool children but only weaker section of the society even thenhe number of beneficiaarries went up and ultimately reached a figure of 30 lakhs stuents per month.

However, the present Gvernment is still in the process of considering and giving a shape to this proposa The advantages of tthiis scheme if implemented, would be that the entire famil gets free wheat to stupplement their family diet depending upon their childrenattending the school aamd since the entire family benefits and their minimum tandard of diet is asssured it increase both the attendance level at the school nd also improves nutriitiion standard. It also does away with extra expenditure ontaff and personnel to imnplement this MDM scheme purchasing of utensils for cocing meals providing oof standard utensils for the beneficiaries etc.

In case MDM ssccheme is introduced all the states it will entail a expenditure on personneel like organisers, helps, utensils both for cooking and eating and at the same tiinme it would only helphe beneficiaries to certain extent. The parameter of expennoditure per beneficiary which at present varies between Rs.1.00 to Re.1.50 in vaarrious States will have tbe raised considerably keeping in view the rise in prices ettcc. The honorarium lev also have to be brought up may be at the minimum waggees level which would ut lot of extra financial burden. Keeping in view all the ffaactors food for educatic may prove to be more beneficial because it is more atractttiive for the mass of theeople of backward rural areas to send their children to schoool and they also do noentail related problems which may arise in future. Howeverr,, this is for the Commite to consider.

BACKGROUND OF TITHE MID-DAY MEA PROGRAMME (MDMP) IN GUJARAT, WESTERN INDIA

The MDMP has bbeeen in existence in Ind since the sixties. Gujarat started the MDMP in 196. 'The Government of ujarat (GOG) has been making successively higher finanncial allocations for theMDMP in its 5-year-Plans. The State has 19 districts withh a strong MDMP in itUrban, Rural and Tribal settings. The programme has beeern considered importai enough to function through an autonomous Commissionneerate of MDMP unde the Chairmanship of the Chief Minister of the State. Thee Commissioner, MDM, is usually a high ranking officer of the Indian Administtrative Services (IAS) f the rank of Additional Chief Secretary. He/She coordiinates the policies/inputsf five state departments, namely, Education, Revenue, Heaallth, Civil Supplies, andBuilding and Water Supplies with reference to the MDMP. The MDMP has a song organizational structure of a Commissioner. Directoor and Assistant Directrs at the State Capital. At the District level it has Depputy Collectors and Manatdars (for Rural/Tribal areas) to oversee the procurement of food commodities, teir storage, distribution, financial audit and overall adminiisstration. Eighty thousnd Organizers (college or school graduates) and their Coookks and Helpers are respnsible at the school-level to cook and serve the hot meals ((ggenerally a cereal-pulsepreparation) to the children in the MDMP. Iodized salt iis routinely used in thMDMP. In 1994, the MDMP covered nearly 3 millionn schoolers. Its annu budgetary allocation was Rs.92 crores or US$29 millon ((exchange rate of Rs.310 = US$1) (Fig 1)(1-3).

BACKGROUND OF THIE SCHOOL HEALTH PROGRAMME IN GUJARAT

A defunct Schooll Health Programme doe exist on paper. There are about 100 functionaries locatedd at the Primary and Halth Centres of the State who are expected to carry out tthe School Health Prgramme. The MDMP may be successful in transferring tthese functionaries to th MDMP.

It is indeed ironiic that Committees set u for School Health preceded those for the Mid-Day Meal. 'Y'et, the recommendatios made by Several National Health Committees, namely, thee Bhore Committee (1946) (4); the Mudaliar Committee (1954) (5): and the Schoool Health Committee (161) (6) to improve School Health have received scant attenttiion in Gujarat until 199.

BASIC FOR IMPROVING TE MID-DAY MEAL PPROGRAMME WITH A HEALTH PACKAGE OF DE'ORMING AND MICRRO-NUTRIENTS (IRON AND VITAMIN A SUPPLEMNTATION)

The improved Mid-DayMeal Programme was based on the 12 years research (1980-1992) on the unerprivileged schooler's hnealth and nutrition status by Gopaldas and her group (7-5). The sizeable nutrieent deficits inspite of the MDM were with respect to vitnin A and iron, rather than calores or protein. These studies showed that in slu Baroda, intestinal parasisitic infections were 53%; iron deficiency anemia as per WO cut-offs of < 12 g/dl wwas 73%: œcular signs of vitamin A deficiency were 33% and anthropometric statuus was poor and revealed that only half the boys (5-15 yers) were normal as by aa weight for height index (WHO, 1976). Anthropometric atus worsened with age with only 31% girls (10-15 years) being in the normal cægory. 'Morbidities of tlthe Gastro-ntestinal-Tract (GIT) and especially amoebiasis Upper Respiratory Infecctions (URI), and malaria were very common and often Stæd reasons for school abssenteeism.

Several intervention stues among underprivilegged schoolers of Baroda followed. In essence a packageof health inputs consiststing of a ingle dose of Albendazole (400 mg), Vitamin tablets (200000 IU), anod Folifer tablets (20 to 60 mg elemental iron) delivered atthe beginning of each sschool term succeeded in bringing down the load of inteinal helminths, increasinng the Hb levels by > 1 g/dl, and reducing the clinical gns of vitamin A deficeiency. The cost of this school health package was onl about Rs.15 or about 50 US Cnts/Child/year versus the Mid-Day Meal whiclcost the GOG about Rs.300/child/year for about 200 feeding days.

Some of the major findins (7-16) of the interventioon studies vere:

i) Iron supplementaion was clearly seen to enhance Ihysical-Work-Capacity (PWC) and certain areas of cognnition. Even non-anemic children appeareto benefit.

ii) Vitamin A supplmentation was positively correlated with improved common morbidies, especially, URI.

iii) Reinfestation mesures had almost as muuch benefit in promoting growth as did th MDM. Further, it helpped in sustaining iron and vitamin A levels the blood.

iv) Dosing schooler with 200000 IU vitaminin A three times a year helped to bring u the serum retinol levelss to adequacy (20 mcg or more per dl) in rarly 60% of the dosed poopulation. However, this dosing regimen was found to be impraactical for a programme situation.

STEPS TAKEN BY THE GOVERNMENT OF GUJARAT (GOG) TO INCLUDE THE ANTHELLEMENTIC AND MICRONUTRIENT PACKAGE AS AN INTEGIAL PART OF THE MOMP (199% CONTINUING)

i) From 1992, the Commissioner, MDIP, GOG, initiated a dialogue with Tara Consultancy Services (TCS) as to how the ongoing MDMP couldd be improved.

ii) In 1993, the Commissionerate, MDMP, GOG obtained the sanction from the Plannning Commission to add on the above "School Health Package" to itits MDM.

iii) In 1994, thee Chief Minister (who is also the Chairman of the MDMP) approved the new activity and annual budget of Rs.5 Cores (abouut 1.6 million US dollrs). The State Legislative Assembly subbsequently approved the activity and budget.

iv) In 1994, thhe MDMP procured the necessary amounts of Abendazole, iron and vitamin A to lose approximately 3 million children in thee MDMP.

v) The MDMP implementors were traind in the dosing schedules by the State Healtlth Department and NGO.

vi) In 1994, the ddosing round (continuing commenced in July/August, 1994.

vii) The MDMP's Commissionerate an its Technical Advisory Committee meeet regularly to review ad strengthen the programme futher.

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3. KARNATAKA

The present programeand modalities of impldementation

A&B:	Number and Identification of target group	This proggramme callel 'Ahara' is in operation in the state in all the 21 districcts and 19) blocks. The beneficiariies are chldren studying in I to IV standards in all the Governmeent primary schools in the state. lDuring 1994-95, 37 lakh children were coveed under the programmne.
C:	Food Component	Two kindss of food are provided - 1) Ready-to-eat processed Energy foood and 2) Raww food is soyamixed wheat powwder/wheat corn based on forrmula approved by CFIRI, Myysore. Each child is given at thee rate of 50 gms per day for 20 days in a nonth. Children aree given one lg packet once a moonth for 8 months in a year whhich is carriedtaken home.
D:	Implementing Agecy	Education Department s implementing this schemne. The foodis prepared at five factorries of M/S Karnataka State Agro Corrn Products Linited, a Governmeent of Karnataka undertaking. They suppply the food upto block-level, and from block-level tc school point, Assistant Educationa Cfficers working at the blocck-level makethe arrangemeents for this tansportation. Agro Corrn Products are paying for transportaation at Rs.4/-per bag from block to thhe school poiit.

E:	Role of Local Bodies: :	Since administration and Management of Primary Education rests with Zilla and the Douty Directors level and AEOs at block level are working under ZillaPaichyat they are supervising the proper and timely implementation of the programme. There are School Betterment Committees which also oversee th proper distribution of food packets to all eligible children.
H:	Infrastructural Support	In the present scheme there is no need for separate shed/storeroom to store these packets since the food packets are distributed every month to the children to take home.
I:	Additional Staff for the programme:	As the supply of mid-day meals is in the form of ready-to-eat form no additional staff is required to monitor this programme. At the state level, there is already a Joint Director (Mid-Day Meals) with staff to look after the programme.
J:	Financia Outlays:	The salary of Joint Director (MES) and his staff is paid out of the education department's budget. Education Department is paying at the average rate of Rs. 10,500 per metric tonne to MS Agro Corn Limited which is inclusive of cost of food, transporation upto the school point, taxes, etc. During 1995-96 it is proposed to cover 40 lakh children and the cost required is Rs. 4200 lahs:
K:	Monitoring Mechanism:	Joint Director (Mid-Day Meals) at the state level, Deputy Director of Public Instruction at the district level, AEOs at the block level and school headmaster at the school level are responsible for implementig the programme. Monthly progress reports from schools to block and block to states are collected in a prescribed proforma.

L:	Evaluation:	So far no s scientific or formal evaluation has been nmade. Now Institute of Parliamenntary Affairs, Bangalore has been asked by M/S Agro Corns to evaluate tthe programme and its impact on improvvement in school attendance and also tthe opinion ofthe community on the conmpatability ofthe food supplied.
M:	Problem in implementation:	The present system is not posing anny problem inl the programme is going vvery smoothly

4. MADHYA PRADSH

STATUS ONTHE PROGGRAMME OF SCHOOINUTRITION IN MADHYA PRADESH AND MODALLITIES OF IMPLEMINATION

At presen there is nono School Nutrition Prgmme under implementation in the State of Madhya Pradesesh. Earlier a School Nrition Programme was being implemented by the Womeren and Child Develomnt Department in schools, hostels and ashrans of the e Tribal Welfare Depatmnt, in primary schools run by the School Eluation Depepartment in the Tribal ub-Plan areas in primary schools run in MADA (Modidified Area Developmeit pproach) areas in the State.

At its peak, the programme h had a coverage as follow:

Item	Districts	Blocks	Scools/Centres	No. of children (In lacs)
Tribal Welfare Schools	45	-	14627	8.5
Education Deparment Schools	34	-	5675	2.83
MADA area schoi	16	-	1404	0.00
Total				11.88

The programne was beeing implemented by he Women and Child Development Department through a Meals iichrge at specified centres. Children were given food at t the rate of 60 grams p meal per beneficiary per day. Funds for the prograamme was provided orin the budget of the Tribel Welfare and School Educacation Departments an money transferred to the Women and Chld Developmeent Department at the in of implementation.

The programmehas not been c operating a successfuly r the last 3-4 years and is almost at a standstill. A ddecision has been tan recently to transfer the implementation of he programmme to the Tribal WelarDepartment.

5. TAMIL NADUU

SCHOOL NUTRITION PROOGRAMME

a) Numbers:

Midday Meals progamme covering 74.000 lakh childen covering all the Districts/Blocks ard all schools in thne state from st. I to X.

i)	Numbers in Sts. I to V (Age group - 5to 9 years)	43 lakhs
ii)	Numbers in Sts. VI to X (Age group - 1) to 14 years)	19 lakhs
iii)	In Pre-schools	12 lakhs

b) Identification of targegroup:

All those attending soool regularly are proovided the noon meal

c) Food Component:

Cooked food

d). Implementing Agency

Social Welfare Deparnent --

There are 68,056 noon meals centres in thhe state. Eachnoon meal centre has the following staf-

1.	Organiser	Rs.340/-p.m.)
2.	Cook	Rs.170/-p.m.)
3.	Helper	(Rs.130/-p.m.)

So nearly 2 lakh staff re employed

e) Role of Local bodies:

Mother Teacher Ouncil in Primary SSchools and Parent Teacher Association in High Shools

g) Linkages : with ICDS

Pre-school children ae also fed in noon meeal centres attched to Balvadies

h) Infrastructural Structure::

Cooking sheds, Utensils and Store rooms are provided at each noon meal centre

j) Financial outlays of the programme:

In classes I to V, the cost of Rs.145 crores
break of s: Rs.118 crores food cost
Rs.26 crores staff cost

For classes VI to X, the cost is Rs.39.5 crore
food cost Rs.35.37 crores.

THE DAILY MENU - WITH DETAILS OF INGREDIENTS, QUANTITY & NUTRITIVE VALUES:

In respect of 2+4+age group children, in the form of cooked food made of Rice, Dhall, Soyaflour, Oil, Veggetables & Greens with following ingredients:

Rice	-	80 grams
Dlall	-	5 grams
Soya	-	5 grams
Oi	-	2 grams
Vegetables and condiments	-	50 grams

Nutritive value:

Toal Calories	-	405
Protein	-	13.00 grams
Minerals	-	5.03 mgms
Cacium	-	189.60 mgms
Carotein	-	1729.00 mgms

For Schod Children in the age group of 5 to 15 (i.e. upto X standard), cooked rice and Sambar made of Dhall, Soya, Vegetable Condiments, Oil & greens with following ingredients are given:

	Age Group 5 -9	Age Group 10 - 15
1. Rice	.00 Grams	120 Grams
2. Dhall	7.5 Grams	7.5 Grams
3. Soya	7.5 Grams	7.5 Grams
4. Oil	1.0 Grams	1.0 Grams
5. Vegetable and condiment	50.0 Grams	50.0 Grams
Nutritive Value		
Calories	500 Grams	600 Grams
Protien	15 Grams	17.2 Grams
Minerals	7.5 Grams	7.5 Grams
Carotein	1730 Mgms.	1730 Mgms.
Calcium	255 Mgms.	260 Mgms.

The Old Age Pensioners are also fed in the Child Welfare Centres with following ratio of ingredients:

Rice	-	200 Grams
Dhall	-	7.5 Grams
Soya	-	7.5 Grams
Oil	-	1.0 Grams
Vegetable & Condiments	-	50.0 Grams

Is the scheme in operation all round the year?

The feeding is given in all 365 days in a year 2+4+ Children & for School Childrens, except in Summer holidays. If the School Children come in the holidays feeding is given.

In addition to that regular Noon-Meal, One boiled Egg is given once in fortnight.

Nutritive Value:

Protein	-	13.3 grams
Fat	-	13.3 grams
Minerals	-	1.0 grams
Energy	-	173 Calories
Iron	-	2.1 mgms.

During Saturdays and Sundays, Corn Rava Kichdi is given to the children in the age group of 2+4+ & Old Age Pensioners with the following ingredients:

	2+4+	O.A.P.
Corn Rava	65 grams	150 grams
Vegetables	2 paise	2 paise
Oil	2 grams	2 grams

On the Birthdays of dignitories like Perarignar Anna, Perunthalaivar Kamarajar, Puratch Thalaivar M.G.R., and Hon'ble Chief Minister Dr. Puratchi Thalavi Jayalalitha, the Sweet Pongal is distributed to the beneficiaries.

Is the coverage unversal or does it cover specified Geographical Areas/Target Groups:

In the case of 2+4+, all the children who are willing to take food are enrolled in the Noon Meal Centres and feeding is given.

In the case of School Chiildren in the age group of 5 to 15 who are willing to take food are enrolled in the Noon Meal Centres and feeing is given.

5. WEST BENGAL

A. Number of Districts/Blocks/Schools/Children covered presently:

- 18 districts including Calcutta.
- 26,21,000 beneficiaries for districts and 2,20,000 beneficiaries for Calcutta under Bread Programme.
- 3,45,000 beneficiaries for rural areas of the districts.

B. Identification of the aget group:

- School Children at the Primary Level (age group 6-11)

C. Food component - pr-processed Food/Cooked Food/Supply of materials to parent:

- Pre-processed food (viz. Bread) @ 75 gms per head.
- Cooked Food -Bulgur wheat + Salad Oil

Food materials were not supplied to parents.

D. Implementing agency : which department : Education/Welfare/Panchayat

- School Education Department

E. Role of Local Bodis - Z.P./Municipalities/Gram Panchayats/Village Education Committe:-

- District Primary School Councils/District School Boards, select schools and the benefiaries.

F. Community Support

- Involvement of the Gram Panchayats in cooking the food and distributing the same from the control kitchen; individual help towards procuring fuel, etc.

G. Linkage with ICDC:

- Nil.

H. Infrastructural support - at the school level - shed/utencils/Store Room, etc.:

- A small amount placed at the disposa of the Control kitche. procuring utencils only.

I. Additional Staff for the programme a he State Level/at District Level/Block Level/School Level:

- At the State Level and at the District Levels only by way of creation of posts of Supervising/ Ministerial and Group D Staff.

No additional staff for the Block/School Level.

J. Financial outlays of the programme on various sub.-components/ management/infrasture/food:

- Administrative cost allowed by the School Education Department

- Funds were placed by the Education Department in favour of the Deputy Director (R&W), West Bengalon the basis of consolidated requisitions for such funds from the dstict authorities.

- District authorities managing/distrbuing the supply of food components at the local school level actd as the agencies for utilising the funds placed at their disposal.

K. Monitoring mechanism:

- CARE - through the Field Office and respective Circle Sub.-Inspectors of Schools.

- SPNP selected by the district authorite: the suppliers supplied food components directly to the schools and te bills for such supply were collected through district authorities.

- Calcutta City Bread Programme was ru by the Great Eastern Hotel which supplied bread to the schools and payment was made directly by the Deputy Director of School Education (R&W), West Bengal, as per bills submitted within norms.

L. Evaluation of the programme, if any

- Child Nutrition Programme has a great impact on enrolment and retention of students.
  Further coverage of more beneficiaries and effective supervision is extremely necessary.

M. **Problem in implementation:**

- Flow of fund - inadequate in the past years resulting in cut in feeding days, funds were not at all available since 1991-92. Additional staff at the State Levell and the District Level for implementation of the school nutrition scheme have been left without work for yearstogether.

Additional information

Our current enrolmen is primary sector (Classs I - V) is about 92 lakhs. At the rate of Rs.1/- perhead per day for 200 dlays in a year, we require about Rs.184 crores, whicl, it is impossible for tthe State Government to bear alone, for 1995-96, ve have a meagre posittion of Rs.2 crores in the Plan-budget.

7. DELHI
SCHOOL NUTRITION PROGRAMME

(a) **Numbers**

Mid-Day Meal Programme covering nearly 4 lakh children has been implemented by the Delhi Government. From the current year onwards, it is proposed to provide Mid-Day Meal to nearly 21 lakh children.

(b) **Identification of target group**

All children attending Delhi Municipal Corporation, NDMC and Government Schools upto Classs V will be covered.

(c) **Food component**

S.No.	Name of the Item	Protein per 100 Gams	Calories per 100 Grams
1.	Fruity Bread without using any colour in Tooti Fruity (Petha)	7.5%	300
2.	Milk Bread (Sweetend)	7.5%	300
3.	Bun without using any colour in Tooti Fruity (Sweetend)	7.5%	300
4.	R.T.E. Food (Salted) extruded	15%	400
5.	High Protein Biscuits (Sweetened)	15%	500-520
6.	Glucose Biscuits - ISI (sweetered)	8%	390
7.	Roasted & Salted Groumd Nuts (without skin)	25.3%	530
8.	Roasted Black Gram (without chhilka)	23.4%	400

(d) **Implementing Agency**

Municipal Corporation, Education IDepartment, NDMC Education Department and NCT Education Department.

(e) **Linkages**

Pre-school children are also given Mid-day Meal.

The items are:-

S.No.	Item recommended for distribution	Protein per 100 grams	Calories per 100 grams
1.	Fruity Bread	10%	300
2.	Biscuits Sweet & Saly	10%	300
3.	Roasted Ground-Nuts	10%	300

(f) **Administrative cost**

Most of the items are except bakery item, supplied at various central points and from where schools collec the items. The schools meet the cost of transport etc. from their own studens funds. Bakery items are supplied directly by the Suppliers at schools. However, all the implementing agencies feel that there has to be provision for transportation of items from the Central points to schools and to meet salary component of staff employed for Miid-Day Meal scheme; at present the staff of other branches and dvisions are given additional work of the scheme.

8. PONDICHERRY

NOTE ON IMPLEMENTATION OF MID-DAY MEAL SCHEME FOR THE YEAR 1994-95

1. The Mid-day Meals scheme has been in existence in the Union Territory of Pondicherry since French regime. At the initial stage, meals were served upto V standard in all the Government Primary and Middle Schools covering the feeding strength of 62,000 students.

2. Consequent to the expansion of the scheme from std. VI to VIII w.e.f. 14.11.1990, the total feeding strength has been raised to 1,03,007.

3. The details of canteen centres with feeding strength and the number of cooks engaged in all the four regions are given below:-

Region	No. of Centres	Feeding strength	Part-time cooks	Assistant cooks	Additional post created
Pondicherry	157	72,431	163	43	64
Karaikal	72	20,351	77	7	13
Mahe	18	6,888	6	14	2
Yanam	11	3,337	-	-	-
	258	1,03,007	246	64	79

4. In Yanam region, meals are prepared and served through DWCRA Units/Mahila Mandals. Meals consist of rice, sambar and poriyal are prepared and served for a period of five school working days on regular basic in a week in all the regions but in Mahe, meals are served on Saturday also to all the schools.

5. Norms for:

Rice : For the students studying from I to IV standard per day per students 130 grams.. For the students studying from V to VIII per day per student 160 grams.

Masala : 250 grams per 100 students per day
Chilli
Powder

Vegetables: Rs.20/- per 100 students per day

Groceries : Rs.5/-per100 students per day
(Ingradients)

Dhall : 500 gramsper 100 students per day

6. Rate of meal for student

The Government have fixed the maximum rate per meal per student at Rs.1.20/- from January, 1992 for school canteens in Pondicherry, Karaikal and Mahe regions. The order appoving the enhancemeint of meals rate from Rs.1.20 to Rs.1.80 is awaited from Government. The DWCRA units in Yanam region is supplying the meal, per student at Rs.1.75 with effect from 10.8.94 which is also approved by Government. The break up of expenditture per meal is as follows:

	Meal supplied ly the school canteens	Meeal supplied by the DWCRA uniit
Rice	090 paise	1.05 paise
Vegetables	025 paise	0.25 paise
Groceries	010 paise	0.10 paise
Chilly Power	005 paise	0.05 paise
Groundnut Oil	010 paise	0.05 paise
Fire hood	015 paise	0.10 paise
Dhall	010 paise	0.10 paise
Transport and Miscellaneous items	015 paise	0.05 paise
	Rs.1.80	Rs.1.75

7. In addition to supply of Mid-day Meals, eggs are also supplied to the students thrice in a month with effect from August 1989 as a nutritious item in all the four regions.

8. Mode of supply of Oil, Masala Chilly Power, Firewood and EGG

For procuring the above diet and non diet articles, the Health Department, Pondicherry is the co-ordinatng department which is calling for common tenders after getting the requirements of diet and non diett articles for every year from

the Department of Health, Education, Social Welfare, Adi-Dravidar Welfare and Jail etc. and the supplies are effected through the tenderers selected by the Tender Committee headed by the Health Department Common procuring procedure is adopted in order to avoid quoting the different rates to different departments by a tenderer and also to adopt an unifom purchase procedure. In this connection, it is stated that co-operaive institutions/Government Undertakings are also invited to participate in the comnon tender system arranged by the Health Department. Neccessary supply orders in this regard are placed with the rate approved contractors by the Education Department as has been done by the other department. These diet and non-diet articles are supplied by the approved contractors in the school premisses itself. For the caendar year 1994 the above said items are supplied by the following co-operative institutions/Government undertaking/contractors.

Description of items	Name of the firm	Approved rate
1. Toor Dhall (Superior Quality)	M/s.PAPSCO Pondicherry	Rs.18/-Kg.
2. Ground Nut oil	-do-	Rs.30/-Kg.
3. Masalas Chilly Powder (Duly tested by the Public Health Laboratory, Pondicherry)	-do-	Rs.26/-Kg.
4. Egg (not less than 40 gm. weight)	-do-	At the rate of reflected by the National Egg Coordination Committee plus 10 paise per egg for transportation charges.
5. Firewood (casurina wood splitted)	Mamallan Pondiicherry	Wet Rs.895/- Dry Rs. 990/- per tonne

Rice: As far as rice is concerned it is being procured from the Government Undertakings by the area suppliies Department like PAPSCO where levy rice is available on the basis of the requisition made by this office.

6. Vegetables and Groceries

This item is being supplied by M/s. PAPSCO, Pondicherry, at the rate of Rs.3.05/- per kg. plus 0.20 paise for transportation charges within 20 kms. and beyond 20 kms. 0.40 paise to all the 157 school cantens in Pondicherry. The

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ceiling limit has been fixed by the Government as 0.20 paise per meal per student.

Groceries: This item hasalso been supplied by Ms. PAPSCO worth of 5 paise per meal per student based on the rate contract finalised by the Health and Welfare Department, Pondicherry at the doorstep of school canteens in Pondicherry and Karaikal regions. In respct of Mahe region where there is no branch office of M/s PAPSCO, the approved contractor is supplying the above said item based on the rate contract finalisd by the Health and Welfare Department (Health)

Meal Carrier: In Pondicherry region there are 157 school canteens centres and 100 sub-centres. For the sub-centres, the meals could not prepared at their premises. The meals are being carried from the Main Canteen Centres by engaging Meals Carriers.

13. Regarding purchaseof utensils, it is stated that based on the consolidated proposals received from various inspecting officers this Directorate used to make purchase by calling for tenders and also by observing the usual purchase procedure. 22 Lit. Cooking Pressure Cooker and smokeless choolas are also fixed in the kitchens. Brass Anas (44 numbers) were distributed to the canteen centres.

14. However piece meal purchase of utensils are being made whenever required with the powers vested with the Chief Educational Officer and Deputy Director (Women's Educaton) for the schools coming under their jurisdiction, on quotation basis.

15. Periodical Inspections are being carried out by the Inspecting Officers viz. Deputy Inspectors of Schools, Chief Educational Officers and Deputy Director (Women's Education). Apart from this, Deputy Director (Adult Education), Joint Director (secondary Education), Joint Director (Elementary Education) and Director of Education used to go for inspection of schools and canteens etc. wherever needed.

(i) COPY OF D.O. LETTER NO.F.2-10/92NFE.I DATED 19TH NOVEMBER, 1992 FROM SHRI S.V. GIR, UNION EDUCATION SECRETARY TO CHIEF SECRETARIS OF ALL STATE GOVERNMENTS

I am writing this specially to invite your attentio to the implementation of Early Childhood Care and Education (ECCE) and gving it a more effective direction. ECCE has been identified as a critical nput in human resource development and forms a major component of the Nationd Policy on Education.

2. As you are aware, the emphasis in ECCE is on th all-round development of children in the age group 0-6 years by providing health, nutrition and early childhood stimulation. Apart from preparing children forprimary education, ECCE provides support services to working mothers and school-going girls with responsibilities of child care. Recent programme evalutions have clearly shown the positive role early childhood education has had on enhanced school enrolment and better retention rates.

3. There is a strong case for strengthening the ECCE component of the ongoing schemes and, more importantly, to achieve a convergence of services between various Government Departments. One of the biggest programmes with an early childhood care and education component is the Integated Child Development Services Scheme with centres spread across the country. These are also Balwadis and day-care schemes managed by Department of Women and Child Development/Social Welfare and Voluntary Ogranisations, as well as pre-primary schools run by local bodies and some State Governments. It would be useful if you could have a look at the manner of implementation of the schemes at the field level, more particularly with a view to achieve synergies that ould be expected by such convergence. You may also consider setting up suitable coordinating mechanism at the State and District levels to bring about and sustain such coordinated functioning of these schemes.

4. It may be useful if the following suggestions are onsidered for your review and the resultant instructions to the field functionaries.

(a) Coordination of timings between primary schools and Anganwadis/Balwadis Centres;

(b) Primary school buildings may be used for Angarwadis/Balwadis activities wherever possible;

(c) Primary school teachers to visit Anganwadis/Bawadis Centres to ensure better enrolment at primary school level;

(d) Organisations such as SCERT etc. to be identified to draw up pre-school materials and curriculum in local languages and locally acceptable techniques which could be used in ECCE activities;

(e) Personnel imparting early childhood education to the trained specifically in ECCE component by SCERT and other organisations;

(f) To identify institution which could run ECCE training courses and to provide recognition to these courses; and

(g) To impress upon all employers to open Early Childhood Care and Education Centres at work sites wherever women are employed.

5. May I request you kindly to write to me at your convenience about the action taken in this regard.

(ii) A BRIEF ON THE CONVERGENCE OF INTER-SECTORAL SERVICES IN THE ANGANWADI CENTRES (ICDS PROJECTS) PREPARED BY DEPARTMENT OF WOMEN AND CHILD DEVELOPMENT

Serious efforts have been made with renewed thrust since 90-91, to ensure effective convergence of inter-sectoral services in the anganwadi centres. Anganwadi centre forms the basic unit of an ICDS project where the package of services as envisaged under the ICDS Scheme are provided to the beneficiaries. The aim of securing convergence of various services in the anganwadi centres has been to improve the efficiency of sectoral programmes and to ensure that the services are provided to the beneficiaries in a cost-effective manner.

Inter sectoral Services identified for convergence:

Specific thrust areas relating to each of the Departments including Ministry of Health and Family Welfare, Rural Development, Education, Urban Development, Welfare and this Department have been identified for convergence and communicated to each of the Ministries , Departments for taking necessary action towards integration/convergence with the sevices of this Department. The identified services for convergence of various Departments are indicated in the following paragraphs:

1. Health Department:-

(i) A fixed day and time of the week may be decided and notified when the ANM will visit each Anganwadi Centre. The frequency of such visits may be alteast once a fortnight.

(ii) the referral services provided under ICDS scheme need to be strengthened by (a) earmarking an exclusive counter at the PHCs/community Health Centres/Sub Centres/District Hospitals for attending the cases referred by the

Anganwadi Worker, and (b) including the number of referal cases from AWCs attended at the Sib Centre/PHC as a specific agenda item for discussion at the sector meetings as well as meetings taken by the District Health Officer at the Primary Helath Centre.

(iii) the deleivery kits in ICDS areas may be routed to pregnant women and TBA through the Anganwadi Worker. Supples of delivery kits from Health Department to Anganwadi Workers shall be routed through Supervisors;

(iv) supply of Vitamin"A" in ICDS areas maybe routed to Anganwadi Workers through Supervisors (Makhiya Sevikas);

(v) the non-ICDS Child Care Scheme run by this Department through the voluntary sector namely, the Creches (numbering 13,000) ,the ECE Centres (numbering 4365), Balwadies (numbering 5000) and Home for Destitute Children etc. also be given covergage under health services, immuniation, etc. and

(vi) the monthly meetings now being held in the Sectors covering 25 villaged by the ANMs, AWWs, LHVs etc. are not being organized under instruction from the CTC and are not always regular. As a step towards integration, the Department of Family Welfare could issue instructions to the health staff to be regular in attending these meetings.

2. Department of Rural Development:-

(i) a suitable protion of Jawahar Rozgar Yojna funds may be earmarked for construction of Anganwadi Centres;

(ii) Tube Wells & Sanitary Latrines may be provided at AWCs even if they are not Government premieses and are on rent;

(iii) the supply of smokeless chullahs may be done through Anganwadi Centres;

(iv) Preference may be given to construction of AWCs in works undertaken out of funds for post-flood/post-natural calamity reconstruction;

(v) DWCRA and ICDS may be converged at the village level wherever DWCRA exists by tying up the following areas:

a. the DWCRA Groups at the Anganwadi Centres will be coterminus and located at the same village as the AWCs.

b. DWCRA women will be given priority for health and nutrition education under ICDS. The children of DWCRA women will be given total ICDS covergage.

c. The AWW will be associated with the DWCRA Group meetings.

d. The AWW by vitue of her close association and familiarity with individual households of the village will be assoicated in the preliminary surveys under DWCRA leading to identification of beneficiaries. Women-headed households can be left to the AWWs exclusively.

e. The AWW can be entrusted with the job of filling up of Loan application forms for the DWCRA Group's Economic activity. She can be given a small honorarium for this work.

f. The production and marketing of products of the DWCRA Groups and food purchase made by the ICDS Centres shall be tied up. The State Governments will make available to the DWCRA Groups essential commodiies at the Government of India issue prices and the DWCRA Groups vill make nutrious and palatable food acceptable to the ICDS benefidaries (the requirement to be assessed by close interaction between the AWW and the DWCRA Groups). The Department of Women & Child Development has issued orders authorisng AWWS to purchase the food directly from the DWCRA Groups. Apart from providing employment and income to women, it will also help save cooking time which the AWW could utilise in some other education or extension work.

g. Even if food preparation is difficult, the DWCRA Groups could engage themselves in marketing activities relating to essential commodities and other items required for a day to day running of ICDS Centes. The DWCRA Groups have been declared as the approved sources for making purchases by the ICDS Centres. The purchase of kits, toys,etc. for Pre-school Education by the AWCs can also be purchaged by the DWCRA Groups.

3. Department of Urban Development:-

(i) Community Centres provided under UBSP may be set up in areas where we have Anganwadi Centres and suitable space may be earmarked for running ICDS Services;

(ii) The Neighbourhood Committees (NHCs) envisaged under the UBSP for taking up Need-Based Mini-Plans for slums should include the Anganwadi Worker wherever ICDS exists as an Ex-officio Member;

(iii) Low cost Technologies involving the use of Smokeless Chullahs, Sanitary Latrines, Water Filters etcv. should be demonstrated and installed in Anganwadi Centres in the Urban areas under UBSP.

(iv) Hand-Pumps & other support water-supply resources may be arranged in Anganwadi centres under VBSP.

4. Department of Education:-

(a) Early Childhood Education : (1) Whee ICDS exists, ECE and PSE componets of ICDS should be integrated. Where ICDS does not exist, ECS & ECCE Centres should be strengthenel by addition of Nutrition as an essential service. (2) Pre-School Educaion component needs qualitative strengthening. For this, Resource Centre at National , State levels have been proposed. At the national & State levels these Resource Centres could be housed in the NCERT or the SCERT or the Regional Centres of NIPCCD where they exist. At the Block levels, CDPOS offices have already been declared as Resource Centres. This Department has despatched kits to 620 blocks of the country for starting these Centres. Funds provided @ Rs. 5000/- per block under IEC in the ICDS budget could be used for strengthening Resource Centres at the Block-level.

(b) Primary School Education & Non-Formal Education:(1) The Primary School Teacher should maintain close contact with the AWCs during admission time and ensure that children are admitted into schools. (2)The AWW should be associated in an annual village level Educational Survey of all housholds alongwith the Primary School Teachers and the Adult Education Instructor. (3) The Non-Formal Education personnel should visit the Nutrition and Health Educational sessions at the AWs and the Mahila Mandals & motivate them for Non-Formal Education, Literary dasses etc.

5. Convergence with Welfare Department:-

The need for extending the Disability Services at the village level through Anganwadi workers has been recognised for quite sometime. The guide-bbok for Anganwadi Workers already includes the job of Prevention, Detection of Early Childhood, Disability amongst Children. This topic is part of the 3 month job training course of Anganwadi Workders. In order to strengthen this area, the Anganwadi Workers are being trained to discharge their functions in the following spheres:

(a) Prevention of Disability;
(b) Early Detection;
(c) Creation of Awareness;and
(d) Making appropriate Referrals etc.

Where the District Rehabilitation Centre (DRC) of the Department of Welfare exists, the referrals will be made to the Centres/Hospitals within the scheme and where DRCs does not exist, referrals will be to the usual of CHCs/PHC/District Hospital network existing in the district. In order to strengthen the training component, suitable changes are being made to the training curriculum of the Job Training Courses for Anganwadi Workers as well as the Refresher Training Course. It has been also decided to devise special training courses for atleast one Instructor for each Anganwadi Training Centre in the country and entrust

this work to RRTCs and the National Institutes which are functioning under the Welfare Ministry. A Check-list has been prepared which can be used by Anganwadi Workers for early detection of disability.

(iii) SOCIAL SAFETY NET : CONVERGENCE OF SERVICES - OBJECTIVES, STRATEGY AND GUIDELINES PREPARED BY PLANNING COMMISSION

1. Government of India have initiated with IDA assistance a programme aimed at strengthening the Social Safety Net (SSN) to ensure that levels of effectiveness in certain programmes in the social sector do not deteriorate and are in fact strengthened. Such efforts are to be concentrated in areas such as Primary Education, Primary Health, Communicable Diseases control, Nutrition and increasing the level of income of women and the poor generally. The objective is to ensure that the burden of strucural adjustments in the economy does not fall on those who are least able to bear it.

SSN Programme

2. The idea of SSN is to expand the coverage of key social sector programmes in the most disadvantaged areas and amongst the deprived groups of the country. The new initiatives finalised in consultation with the concerned Departments are the following:-

(i) An expanded programme of Primary Education targetted at 200 most educationally backward districts with emphasis on increasing enrolment and reducing the dropout rate for girls.

(ii) A programme to improve the efficiency and effectiveness of primary health care.

(iii) Special primary health care programme in 90 demographically weak districts where infant and child mortality rates are unacceptably high.

(iv) Strengthening the various National Communicable Dieseas Control Programmes.

(v) Expansion and strengthening of Integrated Child Development Services (ICDS).

3. The above in any case are the basic and most important social sector programmes being administered by different Departments. These services are presently rather thinly spread and there are no redundancies and overlapping.

Objectives of and strategy for Convergence of Services

4. The main objectives of convergence of services under the Social Safety Net Programme are the following:

(i) Coordinated delivery of some or all services in view of their complementarity of objectiives.

(ii) Laying down of an implementation regime through structural and/or procedural changes, if needed, for optimisation of benefits of these services and ensuring their most cost-effective delivery to the targetted beneficiaries.

(iii) Mobilisation of the community for demand articulation and exigent participation in upgradation of their standard of living.

5. The strategy for convergence of services must taken into account the following ground realities:

(a) Convergence of personnel, that is delivery of services by a nodal multi-purpose worker at the village level does not fit into the present scheme of things and is not workable. The liner formation of Government Departments will give rise to the problem of accountability in addition to the fact that various services require different skills and these skills are no longer so rudimentary as to make it possible for one functionary to acquire.

(b) There is inadequate appreciation at the lower levels of administration of the need for a coordinated approach and of the complementary nature of the services being provided. These are, however, the levels which are responsible for delivery of services and therefore crucial.

(c) The village community is not mobilised for a partcipatory role, whatever be the reasons. Community leadership is not very articulate in most States; neither is voluntary effort sufficiently wide-spread. The Panchayati Raj institutions may be expected to take on this responsibility; but they will take time to do so.

(d) Apart from lack of appreciation of inter-dependence of these services, there is lack of supervision at the village level and hence lack of accountability. Accountability to the community is essential and can perhaps be achieved only when the Panchayati Raj Institutions are in place and are appropriately empowered.

6. Considering these ground realities the approach to achieving convergence of services should include the following elements:

(i) Creation of an institutional mechanism for coordination at the policy-making, supervisory, implementation and functional levels down to the village - for implementation and monitoring as well as introducing changes based on experience gained.

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(ii) The need for decentralisation and flexibility in providing service would require a strategy to respond to local needs in view of the vast differences in social settings and levels of development in different areas.

(iii) The need for local planning, in which a larger role has to be provided to Panchayati Raj bodies; women's organisations and NGOs.

(iv) A change is needed from the current relatively segregated approach of delivery of services to a more integrated and holistic approach leading to administrative efficiency and better cost-effectiveness. This will result in substitution of a present paternalistic approach by a client driven approach involving village leaders through awareness generation for effective articulation and community participation.

Departmental Programmes under SSN

7. At present, the Deptt. of Education have identified forty-two districts in seven States for implementing the District Primary Education Programme (DPEP) for preparing district specific plans with specific schedules and district specific targets under universalisation of Elementary Education Programme. Department of Family Welfare have similarly taken up a programme for improvement Primary Health Centres, in 90 demographically poor performing districts, with a well-equipped operation theatre, labour room and an observation ward with six beds, running water, power and staff quarters to strengthen the maternal and child health care programmes. Five PHCs in each district will be selected for upgradation in the 90 identified districts of the country during the year 1993-94. Department of Health is improving primary health care and strengthening the Communicable/Non-communicable Diseases Control Programme in the country under the SSN Programme. The Department of Women and Child Development, under the SSN Programme, will be extending the CDS to 200 blocks in 103 of the 180 identified focal districts during the year 1993-94. Thus, in all, SSN programme are on going in over 100 districts in the country out of which some of the districts are common to two or three departments.

8. It is envisaged that over a period of years when more and more districts are covered under the SSN Programme, each Department will select some of the districts which have already been selected by other Departments so that over a period of time convergence of services is comprehensively realised in districts where all the four Departments are concurrently operating. Till such time efforts should be to achieve convergence of services in districts which are identified by one Department or more Departments for strengthening particular services.

The Present Scenario

9. Coordinated delivery of inter-related services is not unknown and has already been attempted with varying degrees of success at the village level. On the basis of experience, the areas where synergy is necessary and possible are already identified. Mother and child health care and family welfare; mother and child

health care, supplementary nutrition and pre-primary education, primary education and family welfare (in case of adolescent girls); and, primary education and prevention of communicable diseases, etc. are some of the examples.

9.1 Mahila Swasthya Sangh (MSS) is an excellent example of village level coordination. The MSS comprises of the village level functionaries like the ANM, Anganwadi Workers (ANW), School teacher, Gram Sevikas, etc. and also activist women of the village, In the monthly meeting of the MSS organised by the ANM, who is the convener, information on family welfare, literacy, nutrition, status of the girl child, etc. is disseminated amongst the members. The ANM has been actively involved in various activities of the ICDS. The Department of Education has issued instructions for integration of early child Education Programme with the ICDS. AWW is actively involved in helping the DWCRA groups. All these are examples of a base which has already been created. The objective of the present guidelines is to formalise these efforts and introduce systemic changes so that a holistic approach to delivery of these services characterises the delivery system itself.

Steps Towards Convergence

10. The process of convergence must be effected at a point where the services is delivered i.e., in the village which should also be the basis unit for planning. In a village one of the programmes of the concerned Departments, assuming that it is covered by the programme of more than one Department, may be identified as the 'lead programme'. The Department concerned with the lead programme shall be the convener department for the SSN in that village. In case a village is covered only by ICDS and no other programme, the convener may be either the school teacher or the ANM. The AW worker being a part-time voluntary worker, may not be in a position to act as a convener. The convener has to arrange meetings for inter-face amongst the village level functionaries inter-se and between them and the beneficiaries.

10.1 In a village the functionary of the convener Department shall call a meeting with the beneficiaries - in two separate groups of men and women. In arranging such interaction, help of Panchayats or local NGOs, if any, will taken.

10.2 A joint action plan should be evolved on the basis of the lists of beneficiaries identified and drawn up by the various concerned Departments. Proper identification of beneficiaries is critical to the achievement of the objectives of the SSN. Since the SSN envisages strengthening of existing programmes of certain departments, the criteria for identification of beneficiaries are already laid down under these programmes. However, in order to achieve convergence of services, a flexible approach to identification of beneficiaries would be necessary. In villages which are covered by programmes of more than one Department under the SSN, modification of criteria to ensure convergence should be made possible with the approval of the Collector of the District or any other functionary authorised by him.

10.3 The village level functionaries must normally meet once a week for mutual interaction and sharing of experience.

10.4 Every effort must be made to ensure the coverage of those target groups under the SSN which are the identified beneficiaries of more than one service. For example, women may be the target group for mother health care and family welfare and perhaps prevention of communicable diseases. Similarly pre-school going children may be targetted under health-care, immunisation and the nutrition programmes.

10.5 Coordination should also be achieved in such a manner that the target group is covered by as many services as possible, if eligible. Thus ANM should ensure presence of targetted women in Anganwadis and the AWW should source beneficiary children for Anganwadi from ANM's target group.

10.6 The timings of the village school and Anganwadi may be fixed in such a way so as to facilitate operation of Anganwadi in the school premises. There should be flexibility in timing to suit local conditions.

10.7 The school teacher should visit Anganwadis to identify future school going children. Health worker should visit schools to check health of children.

10.8 One of the mechanisms for convergence of services is a team approach under which all the village level functionaries as a team have interface with organised groups of beneficiaries. There will be no need for some or all functionaries approaching the same beneficiary or even different beneficiaries of the same family, as would be the case since the programmes are complementary in nature. A team approach generates a common stake in achievement of desired goals and leads to administrative efficiency.

10.9 It is possible that some of the functionaries will have more than on village under their jurisdiction and in such cases days for joint visits to each village should be fixed in consultation with standing committees of the Gram Sabhas/Gram Panchayat.

11. Interface with beneficiaries is one of the most important components of convergence of services. Under the SSN the aim should be to achieve such interface not in the traditional paternalistic way but as between a facilitator and a client. This would require attitudinal change in the bureaucracy which is not easy to achieve. It is all the more difficult in the lower levels where importance of a functionary is perceived to depend on how paternalistic he is. However, this is not to underplay the importance of bringing about this change. This has to be achieved through a process of accountability to the village community and villagers' participation in the delivery mechanism. Participation in the grass-root level planning process and in the service delivery mechanism will lead to client education and building up of awareness about the need for these services and hence to demand articulation. the functionaries must be made to realise that the desired results are not possible unless beneficiaries are a willing ally and the beneficiaries made aware

that the services are meant form them for upgradation of their living standards and that they have a right to be exigent.

12. Accountability will be ensured to an extent by making the village level functionaries jointly responsible to the Gram Panchayat and at the village level to the Standing Committee of the Gram Sabha which the Gram Sabha or in its absence Gram Panchayat may nominate. This Committee will be associated with planning and participate in the weekly meetings of the village level workers. It should be in a position to give a feed back on implementation of the programmes directly to the BDO/SDO/Collector, as the case may be. The latter must act on such feed back, which should also be discussed in their monthly meetings. Wherever Panchayati Raj institutions have come up and are appropriately empowered both convergence and accountability will perhaps become simpler and easier. As per 73rd amendment to the Constituion some of these programmes at the village level are to be transferred to Panchayats for implementation. Once this is done, the Gram Panchayat will coordinate such activities and bring about the necessary convergency.

13. In view of the nature of the services covered under the SSN, interaction with and participation of women is crucial to their success. In the reorganised Gram Panchayats 30% of its members will be women. These members or the members of MSS or even an adhoc group which is articulate and can provide leadership in the village, may be formed as a means of interface with women or the village. Voluntary workers like the Sathin in Rajasthan will help in mobilising women.

14. There should be ample scope for NGO's to operate in this programme. The role of NGOs in certain programmes like family welfare and women health care has been very beneficial both in awareness building and also in the delivery of services. The role of NGOs may be marginal in the latter but can be crucial in the former. In fact, implementation of social sector programmes by NGOs can be more cost-effective and efficient as compared to bureaucratic management. But NGOs lack infrastructure and there is a general reluctance to take on implementation of Government programmes because of the procedual rigidities.

14.1 The strategy for ensuring participation of NGOs should be carefully planned and implemented according to local situation and needs. There should careful selection of the NGOs in the first place taking into account their local knowledge and commitment. But once they are selected they should be given full freedom for operation. It has to be ensured that full support of the administration is extended to them and there is good communication on both sides. The complementarity of their work and of the Government functionaries should be clearly defined and promoted. They should be actively associated with all initiatives for involving people's participation and in case some of the NGOs are known to have or can build up the capability, the implementation of the programme can be entrusted to them. This would, however, necessitate change in existing procedures which tend to inhibit their participation. Necessary modification in the procedures must be effected.

15. The level of coordination and convergence contemplated will be achieved only if necessary support mechanisms are in place. As mentioned earlier, the scheme envisages that the collector or the district/CEO of Zilla Parishad and BDOs at the block level must provide leadership and necessary push to the programmes. The Gram Panchayats and Gram Sabha should be actively involved.

16. Training for sensitising officials at districts/block and village levels to the need for convergence of services and for ensuring a holistic approach to their delivery as also to be organised. Such training programme will be in the nature of orientation courses. In fact, this should constitute the first step in the implementation of the SSN programme. A well designed training programme will go a long way in creating awareness and in motivation which are important to the success of the programme.

17. It will be useful to have a designated premise in a village where the village level functionaries gather for their meetings and have interaction with the beneficiaries. A designated premise is known to have improved accessibility to the services. This can be a village school, Panchayat Bhawan, the Anganwadi, health sub-centre or any other public building. For each village the place may be decided in consultation with the Standing Committee of the Gram Sabha or the Gram Panchayat.

18. Transfer of funds for the programmes to village will be possible only when the Panchayat Raj institutions are in place. In fact, under the statue administration of some of the social sector activities at the village level has to be transferred to the panchayats. Until this happens, with a view to encourage local initiative, provisions should be made in the SSN for earmarking of funds at the district level to meet certain common expenditure like training of functionaries, meeting of the functionaries as also the villagers, promotion of village-level voluntary organisations and even for funding local initiatives. It will be in the nature of discretionary fund with the collector/CEO of Zilla Parishad, to be utilised for these purposes when cogently articulated by the grass root levels.

Supervision and Monitoring

19. Most of these programmes of the four departments have their supervisor level functionaries at the sub-district levels. Supervisors of these Department should hold monthly meetings jointly in which performance is reviewed as a whole. Plans will also be developed in such meetings for joint future activities, monitoring, reporting and reviewing systems. Sub-district level Panchayat organisations should be involved in such meetings. SDOs and BDOs can play a useful role in making these meetings effective means of bringing about greater coordination and highlighting thrust areas.

20. At the district level, the Collector/CEO will coordinate all activities. A district level Committee should be set up under his chairmanship, with the district level officers of all Departments concerned with these programmes. This

committee should meet regularly at least once a quarter to review the progress of convergence of programmes, its planning and implementation.

21. A coordination Committee would be set up at the State level with the Secretaries and Heads of the Departments of the Concerned Departments under the Chairmanship of Chief Secretary/Senior most Secretary. The Committee will among other, look into the following:

i) Recommendation for taking up new districts in the coming years;
ii) Review of progress in the selected districts;
iii) Problem solving;
iv) Introduction flexibility in the ongoing schemes to bring them in line with the felt needs of the beneficiaries;
v) Any other matters dealing with implementation of the scheme.

22. At the national level, a Committee notified as the Social Sector Coordination Committee under the Chairmanship of Secretary Coordination, Cabinet Secretariat, has already been set up for continuous review of the functioning of social sector schemes and recommending steps towards greater convergence of services to achieve the programme objectives and to ensure cost effectiveness. Besides, another Committee under the Chairmanship of Member-Secretary, Planning Commission with the Secretaries of concerned Department and the Department of Finance and Expenditure has been set up for reviewing long-term strategies and policies vis-a-vis social sector for given these adequate importance in the planning process.

23. At all levels form the district upwards, there would be an annual review of the SSN programmes to evaluate the extent to which convergence of services envisaged has actually been achieved. Such review meetings should encourage flow of suggestions from not only the Government functionaries involved but also Panchayats, NGOs and community leaders. Corrective action and necessary refinement of programmes and modification in procedures should be undertaken on the basis of such review.

Conclusion

24. Convergence of services is a new approach. In the process of designing and implementation of the programmes under the above strategy, some changes depending upon the local conditions and requirements may be necessary. The recommendations are only indicative and must be understood to leave a lot of scope for local initiative and change.

APPENDIX I

No.F.17-14/95-PN.I
Government of India
Ministry of Human Resource Development
Department of Education

New Delhi, the 19th April, 1995

ORDER

Sub:- Constitution of a Committee on Mid-day Meals.

In pursuance of the Finance Minister's announcement in his 1995-96 Budget speech of setting up of a Committee to work out the modalities of the Central Government's participation in a phased expansion of the Mid-day Meals schemes being operated by some state governments for school children, Hon'ble Minister of Human Resource Development has constituted a Committee to workout the modalities of phased implementation of a school nutrition programme.

2. The Committee shall consist of the following:

i)	Union Education Secretary	Chairman
ii)	Secretary, Department of Expenditure	Member
iii)	Secretary, Department of Women and Child Development	Member
iv)	Secretary, Department of Rural Development	Member
v)	Secretary, Department of Civil Supplies	Member
vi)	Representative of Planning Commission	Member
vii)	Director, National Institute of Nutrition, Hyderabad	Member
viii)	Education Secretary, (School) Government of Tamil Nadu	Member
xi)	Education Secretary, (School) Government of Gujarat	Member

x) Education Secretary, (School) Member
Government of Orissa

xi) Education Secretary, (School) Member
Government of Uttar Pradesh

xii) Joint Secretary (Planning) Member-Secretary
Department of Education

3. The Terms of reference of the Committee will be to work out a scheme to operationalise the decision of the Central Government to participate in a phased expansion of the mid-day meal schemes taking note of, inter-alia,

- coverage
- identification of target group
- modalities of implementation
- implementing agencies
- contribution of state governments
- role of local bodies
- role of community
- linkages with other programmes like ICDS
- infrastructural support at school level including staffing
- financial parameters with due regard to effectiveness, sustainability and replicability
- phased expansion, and
- mechanisms for monitoring and evaluation.

4. The Committee will submit its report within four weeks of its first meeting. It may also visit States as deemed necessary to have a first hand feel of the implementation of the existing schemes.

5. The Committee shall devise its own procedures and methodology of work.

6 The Committee will draw secretarial assistance from Planning and Monitoring Divison (PN.I Section), Department of Education.

Sd/-

(T.C. JAMES)
Under Secretary to the Government of India

APPENDIX II

Shri S.V. Giri Union Education Secretary Government of India	Chairman
Shri K. Venkatesan Secretary Department of Expenditure	Member
Smt. Sarala Gopalan Secretary Department of Women & Child Development	Member
Shri B.N. Yugandhar Secretary Department of Rural Development	Member
Shri S.P. Jakhanwal Secretary Department of Food Procurement and Distribution	Member
Dr. G. Sundaram Secretary Department of Consumer Affairs and Public Distribution System	Member
Shri R.C. Tripathi Adviser(Education) Planning Commission	Member
Dr. M. Mohan Ram Director-in-Charge national Institute of Nutrition Indian Council of Medical Research Hyderabad	Member
Shri A. R. Banerjee Addl. Chief Secretary Education Department Government of Gujarat	Member

Shri D.N. Padhi Comm.-Cum-Secretary School/Mass Education Department Government of Orissa	Member
Smt. C.K. Gariali Secretary Social Welfare and Nutritious Meal Programme Department Government of Tamil Nadu	Member
Shri Alok Ranjan Secretary (Basic Education) Governmenta of Uttar Pradesh	Member
Dr. R.V. Vaidyanatha Ayyar Joint Secretary Department of Education Ministry of Human Resource Development Government of India	Member-Secretary

APPENDIX - III

SECRETARIAT OF THE COMMITTEE

S/Shri

1. T.C. James
   Under Secretary

2. B.K. Ray
   Section Officer

3. Krishna Kumar
   Progammer

4. Om Prakash
   Programmer

5. S.N. Mishra
   Assistant

6. S. R. Gupta
   Assistant

7. V. Nagarajan
   WPO

8. E. Krishna Kumaran
   WPO

9. A.K. Khurana
   Steno

10. Shiv Kumar
    UDC

11. Jai Bir Singh
    UDC

12. S. Raghavendran
    LDC

13. G.N. Yadav
    Daftry

14. S.S. Butola
    Peon

APPENDIX - IV

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