

REPORT OF THE COMMITTEE
ON
PRE-SCHOOL CHILDREN
FEEDING PROGRAMMES



GOVERNMENT OF INDIA
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**MINISTRY OF
EDUCATION & SOCIAL
WELFARE
(Department of Education)**

**Shastri Bhavan
New Delhi.**

D.O.No. 20-4(10)/70-Agri.
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Dear Shri Mitra,

Kindly refer to Office Memorandum No. 20-4(1)/70-Agri. dated 5th December 1970 setting up the Committee on Pre-School Children Feeding Programmes. I submit herewith the report of the Committee.

2. The Committee reviewed the working of five feeding programmes in the country. These are: (1) the mid-day meals programme for school children and pre-school children, (2) Special nutrition programme for pre-school children, expectant women and lactating mothers, (3) the balwadi feeding programme, (4) the applied nutrition programme and (5) composite nutrition programme. The Departments of Education, Social Welfare and Community Development are involved in these programmes. If we take into account the value of food material used in these programmes, expenses on administration and transport of material and other items, the outlay on these programmes would be of the order of Rs. 300 crores in the Fourth Five Year Plan. In organizing such feeding programmes for the vulnerable sections of the population a package approach appears advisable. This may provide services such as health care and immunisation, nutritional feeding as well as nutrition and health education. It will be necessary to motivate voluntary agencies and the public at large to take increasing interest in operating these programmes. Similar approaches are being attempted already through pilot projects by the Social Welfare Department

and the Central Social Welfare Board. It will be seen from the report of the Committee that such a package approach is quite feasible.

3. The members of the Committee would like to record their appreciation of the work done by Shri K.V. Natarajan and Shri S.N. Panikkar in organizing the work of the Committee as well as in drafting the report.

Yours sincerely,

Sd/-

(T.R. Jayaraman)

Shri Asok Mitra,

Secretary

Planning Commission,
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CHAPTER I

INTRODUCTION

A suggestion was made in a meeting of the Nutrition Coordination Group presided by Member (Agriculture), Shri B. Venkatappiah on 28th October, 1970 to constitute a Committee on Pre-School Feeding Programmes. The Coordination Group had considered various aspects of nutrition feeding programmes. It was proposed that an integrated picture of all feeding programmes catering to pre-school children should be obtained. Accordingly, the Planning Commission constituted the Committee on Pre-School Children Feeding Programmes. A copy of the office memorandum constituting the Committee is at Annexure I. Consequent upon internal changes in subjects allotted to Joint Secretaries of Department of Food, Shri G.C.N. Chahal took the place of Shri R. Balasubramanian. Dr. K. Bagchi left on an assignment abroad in 1971 and Dr. (Miss) R. Karnad, Deputy Assistant Director General of Health Services (Nutrition) was nominated in his place.

Terms of Reference

1.2. Terms of reference of the Committee are:—

- (i) a close examination of the pre-school feeding programmes undertaken as part of the mid-day meals programme in order to dovetail them suitably with pre-school feeding programmes of the Social Welfare Department;
- (ii) suggesting ways and means of combining of the two programmes of the Department of Social Welfare to cover the age group of 0-6 years; and
- (iii) suggesting appropriate coordination between pre-school feeding programmes of the Department of Social Welfare and that of the Department of Education.

The Nutrition Co-ordination Group of the Planning Commission at its meeting held on 31st March, 1971, decided that the Committee would, in addition to their original terms of reference, undertake collection of information on ways and means

of improving progress reporting relating to supplemental feeding programmes.

1.3. Detailed questionnaires were prepared for obtaining information from State Governments. A copy of the questionnaire is at Annexure II. Prior to holding discussions with State Governments, a list of points was drawn up on which clarifications were sought from State Governments. Annexure III lists out points communicated to State Governments.

Field Visits

1.4. The Committee held 24 meetings both at New Delhi and in State Capitals. The Committee exchanged views with Experts on Nutrition as part of their enquiry. Teams of the Committee visited the following States to gain first hand knowledge on the on-going feeding programmes and to hold detailed discussions with State Governments:—

Gujarat
Tamil Nadu
Mysore
Kerala
West Bengal
Orissa
Punjab
Haryana

Dates of visits to States are given in Annexure IV.

Consultation with Experts

1.5. We were able to cover a fairly representative cross section of the States and could visit a number of feeding centres in operation. Among the Nutrition Experts whom the Committee could meet and discuss in detail programmes of special feeding for pre-school children were Dr. C. Gopalan, Director, National Institute of Nutrition, Prof. P.N. Wahi, Director General of Indian Council of Medical Research, Dr. M. Swaminathan and Shri M.R. Chandrasekhara of Central Food Technological Research Institute, Mysore, Dr. K.K.P.N. Rao, Senior Nutrition Adviser, F.A.O., New Delhi, Mr. Paul Cifrino, Chief (Nutrition), U.S.A.I.D., New Delhi, Mr. Charles L. Sykes, Director, CARE India, New Delhi, Mr. H.L. Halens, Chief,

Nutrition Division, UNICEF, New Delhi Mr. V. Soler Sola, UNICEF, New Delhi and Dr. M. Thangavelu, W.H.O., New Delhi.

1.6. This report has eight chapters. In Chapter II, a detailed review of the pre-school feeding programmes undertaken as part of mid-day meals programmes in schools is attempted. Chapter III examines pre-school feeding programmes undertaken by Department of Social Welfare of Government of India as well as similar programmes of other departments. In this chapter certain policy issues common to all pre-school feeding programmes are also considered. Progress reporting arrangements on nutrition feeding programmes are discussed in Chapter IV. Deliberations of the Committee as well as the material collected during visits to States and discussions with experts led to a consideration of further studies and research in regard to programmes of child feeding. Chapter V deals with further studies and research prospects in this area of nutrition development. Administration and transportation are two important aspects of feeding programmes. These are dealt with in Chapter VI. Chapter VII has for its main theme coordination and evaluation of nutrition programmes. The summary of recommendations are given in Chapter VIII.

Acknowledgements

1.7. The Committee would like to record their appreciation of the co-operation extended by State Governments in sending information in time on various aspects of the Committee's work.

1.8. Shri S.N. Panikkar, Senior Research Officer, Planning Commission was responsible for preparation of detailed notes for consideration by the Committee and for field visits. Shri Panikkar drafted considerable sections of the report. The Committee would like to record their appreciation of the work done by him.

1.9. Shri Mahmood Ali, Deputy Secretary and Shri A.N. Dhawan, Assistant Educational Adviser of Ministry of Education undertook substantial work on behalf of the Committee in obtaining replies from State to the questionnaire. They were responsible for organising a special meeting on the mid-day meals programmes in which State representatives participated in New Delhi. Shri S.P. Vittal and Shri N.H. Rama-

krishnan, Deputy Directors in the Department of Social Welfare and Shri V.S. Sinha, Deputy Secretary, Department of Community Development took part in all activities of the Committee, especially in visits to States. To them and Shri G.D. Sharma, Deputy Technical Adviser of the Department of Food, the Committee would like to convey their thanks.

CHAPTER II

PRE-SCHOOL CHILDREN IN MID-DAY MEALS PROGRAMME

The Pre-School Child

The pre-school age has been accepted generally as the age from 0-6 years. This age could be conveniently divided into three heads, from birth to one year, from one year to three years and from three years to six years. According to the Report of United Nations Economic and Social Council, the percentage of pre-school children to total population in less developed countries in 1970 was 21.7. The report has estimated that pre-school population will increase in less developed countries from 552 million in 1970 to 681 million in 1980. The children in the pre-school age constitute about 100 million in India today.

2.2. In his introduction to the Report on the Protein Problem submitted to the General Assembly at its 23rd Session, U.N. Secretary General stated "that every country must develop individual plans for ensuring that their own pre-school children should eat sufficient nourishing food. The importance of doing this cannot be over-emphasised because, protein-calorie malnutrition in early life can lead to physical and mental retardation which may not be reversible." State Policy in India has recognised the need for supplemental feeding for pre-school children and several programmes have been in operation under the auspices of both governmental and non-governmental agencies for feeding of pre-school children. Among these, the more important programmes are those of the Departments of Education of State Governments, the Department of Social Welfare of Government of India and demonstration feeding component of the Applied Nutrition Programme and Composite Nutrition Programme of union Department of Community Development. In this Chapter feeding of pre-school children as part of mid-day meals programme is discussed. It would be difficult to assess the on-going programmes of pre-school feeding which form part of the mid-day meals programme without referring in detail to the mid-day meals programme itself.

Origin of the Programme

2.3. A school meals scheme for children was inaugurated by the Madras Corporation, as early as 1925, on a modest scale. In 1956, the former Madras State launched the scheme of free school meals to poor children in elementary schools. The scheme was intended to achieve the dual purpose of (i) enrolling poor children who remained outside the school owing to poverty of their parents and (ii) giving at least one satisfactory meal to poor children who attended the school. In each school selected, about one third of the children were fed. The mid-day meal provided under this scheme generally consisted of cooked rice served with *sambar* and vegetables or curds and pickles. The normal cost of this meal was about ten paise. Towards this, the local donors contributed four paise per meal and the rest was contributed by the State Government. Similar schemes were also in operation, in a limited way, in some other States during Second and Third Five year Plan periods.

Expansion over the Last Decade

2.4. The school meals scheme was in operation in about 40,300 schools covering roughly 24.6 lakh students all over the country in the year 1961-62. The number of children fed through the programme increased more than four times during the decade as shown below:—

Year	States	No. of children covered
1	2	3
1962-63	(1) Andhra Pradesh (2) Kerala (3) Madras (4) Punjab (5) Rajasthan	42 lakhs
1963-64	(1)-(5) as above (6) Mysore	63 lakhs
1964-65	(1)-(6) as above (7) West Bengal	83 lakhs
1965-66	(1)-(7) as above (8) Gujarat	

1	2	3
	(9) Orissa	
	(10) Madhya Pradesh	92 lakhs
	(11) Maharashtra	
	(12) Uttar Pradesh	
1966-67	(1)-(12) as above	96 lakhs
1967-68	(1)-(12) as above	132 lakhs
1968-69	(1)-(12) as above	Includes children fed under scarcity relief programme.
	(13) Bihar	133 lakhs
	(14) Haryana	
1969-70	(1)-(14) as above	100 lakhs
1970-71	(1)-(14) as above	111 lakhs
1971-72	(1)-(12) as above	Bihar opted out of the programme with effect from 1st January, 1971.
	(13) Haryana	119 lakhs ¹
	(14) Pondicherry ¹	

Centrally Sponsored Scheme of Mid-day meals

2.5. A School Health Committee which was appointed by Government of India in February 1960, to assess the standard of health and nutrition of school going children, and to suggest ways and means of improving them, made several recommendations. In pursuance of these recommendations a centrally sponsored scheme of mid-day meals was formulated and given effect from 1962-63. The objectives of the scheme were as follows:—

- (i) to improve the nutritional level amongst school children in general and, in particular, to make up the common deficiency of proteins, and
- (ii) to attract children to enrol themselves into schools and to encourage regular attendance.

For realising these objectives, it was proposed that mid-day meals be provided to all needy children that attend primary schools. The calculation made in the scheme was based on the assumption that mid-day meals should be provided for about 200 days in an academic year.

¹This includes figures for other union territories also.
Details are given in Annexure I.

External Assistance

2.6. Organisations like Cooperative American Relief Everywhere (CARE), Christian Agency for Social Action (CASA) and UN agencies like UNICEF and FAO, assisted in implementation of this programme by giving commodities such as cornflour, bulgar wheat, vegetable oil and milk powder free of cost at Indian ports. From June 1965, however, UNICEF withdrew its assistance for the scheme. CARE's assistance to the programme has since continued.

Government of India's Assistance

2.7. During the Third Five Year Plan, Government of India gave a grant to states at one third of expenditure incurred by them on mid-day meals. After the Third Plan, the scheme was placed in the state sector and central assistance was raised to 40% of the actual expenditure. This programme continued in subsequent two annual plans. With the commencement of Fourth Plan, central assistance for the scheme was included in block central grants given to States.

Current Coverage

2.8. The programme is now being implemented mainly with food supplied under the Indo-CARE Agreement of 1950. It is in operation in all states except Assam, Meghalaya, Nagaland, Manipur, Himachal Pradesh, Jammu & Kashmir and Bihar. In Bihar the programme was being implemented till recently but was discontinued from first January 1971. The number of beneficiaries in the country is approximately 119 lakhs, both under school going and pre-school categories. State-wise break-up of this figure for the years 1969-70, 1970-71 and 1971-72 is shown at Annexure I.

2.9. Commodities supplied under the programme are CSM¹ (a formulated food containing 70 per cent processed corn meal, 25 per cent soya flour and 5 per cent non-fat dry milk) Balahar,² bulgar wheat, wheat flour, oil, milk powder and milk bread.

¹CSM—Corn Soya Milk.

²Balahar—The present composition of Balahar is given below:

15 per cent Soya bean
15 per cent groundnut
70 per cent bulgar wheat

Balahar is a weaning food produced by the Food Corporation of India for the Union Department of Food.

The food is prepared to suit the taste of children. Information about the food served is at Annexure II.

0-5 Age group

2.10. It is customary for children in India to join school at the age of five years though the compulsory school going age is six years. Thus while 0-6 year is considered as the pre-school period, nearly 15-20 per cent of the age-group 5-6 years may already be in school. In streamlining nutrition programme for pre-school children it is advisable to avoid catering for this group by two sets of feeding programmes. This can be ensured by confining pre-school children feeding programmes to age groups 0-5 years, if the age group 5-6 years is covered in the mid-day meals scheme.

Administration

2.11. School feeding programme is mainly administered by State Department of Education. In a few States however, the scheme is the responsibility of other departments, as shown below:

Gujarat	Panchayat & Health Department.
Madhya Pradesh	Tribal and Welfare Department.
Orissa	Community Development and Panchayat Raj Department.
Rajasthan	Panchayat and Development Department.
West Bengal	Relief and Social Welfare Department.

In certain States, Panchayat Raj institutions in rural areas and municipalities and corporations in urban areas are administering the programme. In Madhya Pradesh the programme is confined to tribal schools. It appears advisable in the interest of mid-day meals programme that administration of the programme should rest with a single department in each State.

Recommendations of the School Health Committee

2.12. The School Health Committee referred to already had made, among others, the following recommendations:

- (i) The primary aim of the school meals programme should be to improve health and encourage sound dietary habits among children.

- (ii) The school meal should provide approximately one-third of the dietary and nutritional requirements of children.
- (iii) The school meal should be based on cheap nutrition and locally available foods.
- (iv) Any proposal about the external assistance towards this important programme in the shape of food articles, should be favourably considered. The acceptance of external aid is suggested as an interim measure only. It should be possible to finance school meals programme through our own resources, as and when there is increased community participation, improvement in the internal resources, and in the food production in the country.

Systematic evaluations have not been carried out in all the States on the impact of mid-day meals programme on the health of beneficiaries, but information furnished by the States that have carried out some surveys and evaluations is encouraging. Director, Public Instruction, Mysore, has reported that, "it is certain that children have been more active than before and are enthusiastic to take part in the co-curricular activities..... children are now cheerful and attentive than before". An evaluation study was also conducted by the Panchayat and Cooperation Department of Andhra Pradesh Government which has observed that, "the health of the students has improved after taking the food served under mid-day meals programme." A study conducted on behalf of CARE in Orissa, however, brought out different conclusions.

Protein and Caloric contents

2.13. Total daily intake of calories and proteins as recommended by the Indian Council of Medical Research is given below:—

Group	Particulars	Net Calories	Proteins (GM)
Children	1 year		
	2 years	1200	17
	3 years		
	4-6 years	1500	22
	7-8 years	1800	33
	10-12 years	2100	41

As against this norm, commodities served in pre-school and school feeding programmes generally provide from 11 to 26.3 grams-protein and 327 to 663 calories.

Cost of food Materials

2.14. The school mid-day meals programme is at present mainly dependent on free food commodities being provided by CARE. The total cost of food being received for these programmes, according to certain estimates made by CARE, is approximately Rs. 40 crores per year. The cost on food per child per year works out to Rs. 36.36. Considering that there are 200 feeding days in a year the cost of a single meal works out to 19 paise.

Need for Self-Reliance

2.15. In future, it may be necessary to substitute the materials now being supplied by CARE, Catholic Relief Society and similar agencies through increased production of processed foods within the country itself. Each State may be allowed to make its own version of *Balahar* depending upon local tastes and other factors. It is encouraging to note that in Tamil Nadu, 50 per cent of food material used in feeding programmes is based on local resources. It is necessary to achieve self-reliance in the matter of feeding programmes in the next few years. We are informed that a Committee is being set up by Government of India to examine this matter in detail.

Costing Pattern of locally available Food

2.16. Experiments conducted in Kerala of using special food made out of *tapioca* and in Tamil Nadu out of local gram (WIN Food) have thrown up interesting light on costing pattern of the locally available foods for use in this programme. The expenditure on local foods is estimated approximately at 10 paise per meal per day. Assuming the number of feeding days in a year as 200, about Rs. 24.0 crores would be required in respect of food commodities for 119 lakh children now covered under the programme. At present the states are spending about Rs. 6.4 crores on the programme. If the programme were to be self-supporting the additional outlay required would be about Rs. 18 crores excluding expenditure on transport and distribution of food stuffs.

Use of gardens attached to Schools

2.17. States such as Tamil Nadu and Mysore have launched some programmes for using land earmarked for schools to grow food for mid-day meals programme. It was suggested to State Governments by Government of India that gardens attached to schools may be used to produce at least vegetables which can supplement the cereal food being supplied, apart from giving "work experience" to students. The States were urged to consider large-scale schemes to utilise land attached to schools more intensively with the help of State Agriculture Departments. Such an effort is yet to make an impact on feeding programmes.

Central kitchens

2.18. The concept of central kitchens has been tried out in Tamil Nadu. The central kitchen has relieved the teacher and the head-master from the time consuming and demanding task of preparing food daily. At present, 30 central kitchens are being operated in Chingleput district in Tamil Nadu. They use 66 delivery vans supplied by CARE at a cost of about Rs. 60 lakhs. State Government provides the operating expenditure. The food is prepared in large stainless steel cooking vessels and served to the schools in delivery vans. The fuel used for cooking is kerosene. The central kitchen serves between 3000 to 7000 children daily. Each of these kitchens has a godown capacity for one month's supply of foodstuffs. Cooking begins at about 4 A. M. and is generally completed by 9 A.M. The food served varies from day to day. One difficulty in providing Central Kitchens is that the initial cost is quite high approximating to rupees two lakh per kitchen. The delivery system in this operation consumes approximately 51 per cent of recurring costs. The method appears to be relevant in densely populated areas.

Role of Mahila Mandals

2.19. Increased community participation is essential for placing the mid-day meals scheme on a permanent footing. Participation of parents is also equally essential in a programme of this magnitude. If *mahila samitis/mahila mandals* are strengthened in each State, it may be possible to execute this programme

at least partially through them in a period of 5—10 years. During our visits to certain States, particularly to Kerala and Punjab, we noticed the enthusiasm with which the Applied Nutrition Programme was being handled by mahila mandals/mahila samities. Panchayati Raj institutions can provide overall supervision in the implementation of the mid-day meals programme. The State level nutrition coordination committee can also give leadership and guidance. If mahila mandals can take over the execution of the programme, the teacher will be relieved of the burden of cooking which is at present generally his responsibility. The mahila mandals should, therefore, be persuaded to shoulder increasing responsibility in this connection through appropriate inducements.

Pre-school Component of Mid-day Meals Programme

2.20. The objectives of pre-school feeding programme forming part of school mid-day meals programme appear to be two-fold. The first is to introduce the young children to the school atmosphere and to inculcate the school habit and the second is to provide at least one nutritious meal to these children.

Scheme to attach Balwadis to Primary Schools

2.21. In States such as Punjab and Haryana, we noticed children of age group 4-5 years voluntarily visiting the schools which are also feeding centres. They had come with their elder brothers and sisters to the school and were watching the lessons. It is obvious that there is scope for arranging regular pre-school classes for such children. The Committee was glad to hear that the union Social Welfare Department has a scheme under consideration for attaching balwadis to primary schools. We have noted in this connection the detailed recommendations of the Study Group on the Development of the pre-school child which reported to the Ministry of Education and Social Welfare in February 1972. When the proposal is put into operation, about one million children of pre-school age now attending school feeding centres can receive pre-school education and health service apart from the benefit of nutrition. We would, therefore, urge implementation of the new scheme expeditiously.

Total number of Beneficiaries

2.22. Out of an approximate total of 11.9 million beneficiaries under the mid-day meals programme, it is estimated that

more than 1 million constitute pre-school beneficiaries. State-wise data of pre-school beneficiaries forming part of mid-day meals programme are given below:—

S. No.	Name of the State	No. of pre-school children being fed as part of the mid-day meals programme for 1971-72
1	2	3
1.	Andhra Pradesh	10245
2.	Gujarat	215000 ¹
3.	Haryana	12000
4.	Kerala	—
5.	Madhya Pradesh	339000
6.	Mysore	400000
7.	Maharashtra	20000
8.	Orissa	116000
9.	Punjab	25000
10.	Rajasthan	—
11.	Tamil Nadu	—
12.	Uttar Pradesh	—
13.	West Bengal	250000
Union Territories		
14.	Delhi Administration	355
15.	Dadra & Nagar Haveli	8000 ¹
16.	Goa, Daman & Diu	—
17.	Pondicherry	—
Total		1395600

No. of Feeding days

2.23. The number of feeding days generally ranges from 200-220. The National Institute of Nutrition is of the view that the number of feeding days in a year should be at least 250 to have the desired impact on the children. We suggest that this norm should be generally adopted.

¹Includes school children beneficiaries also.

Advantages of the Scheme

2.24. We have considered the desirability of retaining the pre-school feeding component in the mid-day meals programme for school children. There are certain advantages in such an arrangement. Firstly, there is an institution readily available which is engaged in a feeding programme. The programme would help in forming the school going habit among children who approach the school-going age. Besides, it has an academic purpose. The programme is intended to familiarise children with the school atmosphere, making it easier for them to be weaned away from their homes. The addition of the pre-school children to school-children beneficiaries helps in improving economies of scale in terms of storage capacity, cooking time etc.

Disadvantages of the Scheme

2.25. On the other hand, pre-school children feeding forming a permanent aspect of mid-day meals programme, presents formidable difficulties. In the first place, different recipes are advisable for pre-schoolers as compared to the school going children. Such a difference in types of food involves invariably extra cooking time and additional staff. Further, the most vulnerable group belonging to the 0-3 years are rarely able to participate in the mid-day meals scheme. Mothers cannot always bring them to school for the feeding programme.

Coordination

2.26. The pre-school segment of mid-day meals programme can be coordinated with the programmes of feeding of the Social Welfare Department, without much difficulty. In any village or town where there is a primary school and a centre for special nutritional feeding programme of the Department of Social Welfare, all the pre-school children should be fed at the latter centre. This is a suggestion which we would like to be implemented without delay.

Demonstration Feeding Centres in Schools

2.27. The Committee visited feeding programme undertaken in schools for pre-school children in a number of States. The health and educational aspects of the programme are not always receiving the importance they deserve. The additional advantage of educating the pre-school child available in this

programme should not be overlooked. It is necessary to inculcate the principles of nutrition both among the beneficiaries and the functionaries. From this point of view, we would recommend that demonstration feeding centres should be opened in schools in each state, fully equipped with model kitchens, utensils etc., and adequate supply of drinking water. The existing facilities available for imparting nutrition education through mobile food and extension units of the union Department of Food as well as through the demonstration feeding of the Applied Nutrition Programme and Composite Nutrition Programme conducted by the Union Department of the Community Development should also be fully utilised for the purpose.

CHAPTER III

PRE-SCHOOL CHILDREN FEEDING PROGRAMMES OF OTHER DEPARTMENTS AND POLICY ISSUES

Introduction

One of the terms of reference of the Committee is to examine the feasibility of integrating the two feeding programmes for pre-school children of Union Department of Social Welfare. Besides pre-school children feeding programmes of Social Welfare and Community Development Departments, some of the general policy issues common to them are dealt with in part II of this Chapter.

PART I

FEEDING PROGRAMMES OF SOCIAL WELFARE AND COMMUNITY DEVELOPMENT DEPARTMENTS

Development of Balwadis

3.2. As early as in 1952, Central Social Welfare Board provided grants for promoting activities of balwadis in urban and rural areas. In 1954, the programme of welfare extension projects was promoted in which balwadis for pre-school children and mahila mandals for mothers formed the basic activity. The programme was gradually extended in rural areas through coordinated Welfare Extension Projects covering more than 260 community development blocks. In addition, the department of Social Welfare promoted programmes of Integrated Child Welfare Services in rural areas during Third Five Year Plan with the help of State Governments. In 1967, the programme of Family and Child Welfare was designed to cover 100 community development blocks by 1968-69 and had its focus on health and nutritional care of pre-school children besides education of mothers and young women in child care and home management.

Children Feeding through Balwadis

3.3. Services for pre-school children in balwadis include regular health check-up, immunisation against contagious diseases supplemental nutrition, habit formation and socialisation through games and recreation. Emphasis is laid on providing supplemental nutrition to children in balwadis. At least one third of the daily nutritional requirements of the child is expected to be provided in this programme. The nutrition programme has also educative value as it brings together several children of the same age and inculcates good habits and taste for different types of foods. A provision of 15 paise per child per day has been made for meeting food expenses under the programme. Allowing for fuel and other items to be supplied through local contribution, total cost per child per day of the food is expected to be around 25 paise. Supervision of balwadis is undertaken by officers of State Social Welfare Boards. Training of bal-sevikas and workers at balwadis is designed to cover health and nutritional requirements of pre-school children. A provision of Rs. 5 crores is available in the Fourth Plan for promoting the programme of nutrition through balwadis. The programme commenced functioning in 461 balwadis serving 19,280 children from 1st January, 1971.

Special Nutrition Programme

3.4. The second programme of Union Social Welfare Department for nutrition feeding of pre-school children was taken up in 1970-71 as part of new initiatives announced by the Prime Minister in her budget speech in 1970-71. Accordingly a special programme of nutrition feeding was introduced in July 1970. It was envisaged that the nutritious foods would be supplied under the scheme in 1970-71 for 6.8 lakh children in the age group 0-3 years. During 1971-72, Social Welfare Department expanded the programme and covered two million children as well as pregnant women and nursing mothers through over 15,000 feeding centres. The broad features of the programme were finalised at the Conference of Secretaries and Directors incharge of the programme in the States and Union Territories held in February, 1971. The scheme is now intended for children in the age group 0-6 years as well as pregnant women and nursing mothers. The nutrition supplement consists of 300 calories and 10-15 grams of protein for children and 500 calories and 25 grams protein for pregnant women and nursing mothers.

Services at Feeding Centres

3.5. The scheme proposes periodical medical check up for beneficiary children. Along with feeding, efforts are made to undertake immunisation of beneficiaries. Sample studies are undertaken from time to time to determine the impact of the programme. Improvement in the appearance of children and haemoglobin content of their blood and weight would be assessed from time to time. Feeding of children is undertaken for 300 days a year. Weighing machines are provided at the rate of one for eight centres in urban areas and one for 12 centres in tribal areas. The programme envisages use of various food materials according to their availability and convenience. Bread and milk or other processed food will be the main items of food in urban areas. In tribal areas, locally produced foods, gift food or balahar are used. As CARE gift commodities are in use widely in many areas, cost of food on an average has been estimated to be within 18 paise per child per day. In the hilly areas, where processed foods are not available and cost of local foods are high, higher expenditure is allowed. Inspectors with motor cycles are provided in the urban slum areas at the rate of one for every 10,000 beneficiaries. In the tribal areas, the programme is inspected by existing staff of Community Development Blocks.

Suggestions for improvement

3.6. In the light of visits to feeding centres of this programme in various parts of the country and the discussions we had with State Governments, we feel that the following suggestions may improve implementation of this programme:-

- (i) immunisation programme for children and supply of drinking water should be adequately provided;
- (ii) adequate space and shelter for feeding programmes will have to be properly ensured at feeding centres;
- (iii) organisational machinery at ground level will have to be evolved to implement the programme without interruption;
- (iv) effective supervision, guidance and follow-up at different levels will have to be ensured for this programme; and
- (v) there is need for bringing together literature on health care, nutrition and other related aspects, which could

be utilised by the workers in the fields and also beneficiaries.

These suggestions are elaborated below.

Health Aspects of Feeding Programmes

3.7. Representatives of one State Government told the Committee that the work of physical check up of children attending feeding centres was being done with the help of Medical Officer of the Primary Health Centres in tribal blocks. The urban area municipalities made their own arrangements for physical check up of the beneficiaries. However, the Committee noticed in most of the States that not much attention is being paid to health and educational aspects of the feeding programmes.

3.8. In certain centres visited by the Committee arrangements have been made at the commencement of feeding programmes to record heights and weights of children. In Baroda municipality, such an arrangement has been made and a regular medical examination was started with the help of voluntary organisations in the city such as Family Planning Centre, Indian Red Cross Society and Indian Medical Association. We were told that it was planned to complete the medical examination of beneficiary children before the end of July 1971. All children covered under the programme were being immunised against small pox, tuberculosis and polio besides being given a dose of triple vaccine. In Baroda Municipal Centre, the children were also taught some aspects of personal hygiene, for example, washing their hands clean before eating. At the commencement of the programme, the children were bringing their own utensils for receiving and drinking milk at the centres. We were informed that recently the Municipal Corporation purchased utensils for use in feeding centres.

3.9. In certain centres, the people resented immunisation being combined with feeding programmes. In such places, the State Government would have to take up the immunisation in a phased manner. We have also heard from another State Government that any attempt to give a blanket treatment for worms would not be welcomed and has to be taken up only gradually after winning the confidence of the parents.

Nutritive value of Food Material

3.10. The Committee came to know at several centres that the calorie protein content of food served was not

adequate compared to the norms prescribed by the Department of Social Welfare. The programme contemplates 300 calories with 12 grams of protein per day per child. In the Municipal Corporation of Baroda, there were 24 centres at the time of the visit of the Committee in various slum areas of the city covering approximately 8200 children. A child was receiving 200 ml. double toned milk and slices of modren bread weighing 45 grams. The nutrition value of the articles provided was as follows:-

Food	Quantity	Calorie	Protein
Milk	200 ml.	140	8.0 grams
Bread	20	80	2.2 "
Total	—	220	10.2 "

obviously this is not adequate for supplemental feeding.

Special Nutrition Programme Coverage of Beneficiaries

3.11. In some State, there was an impression that Special Nutrition Programme of the Social Welfare Department was confined to scheduled castes and scheduled tribes and slum dwellers only. All children in slum and tribal areas who would like to avail themselves of the opportunity under the Special Nutrition Programme have been allowed to do so. The Committee has been informed that the Department of Social Welfare has clarified the position that the programme is not confined to scheduled castes and scheduled tribes only.

Buildings for Feeding Centres

3.12. The absence of a structure or a building for the feeding centre has adversely affected the operation of the scheme. This problem has become acute in the case of feeding programmes other than mid-day meals programme which has a base in the school. In many cities, feeding under Special Nutrition Programme is operated right on the street or pavement. Thus an opportunity is lost for converting the feeding programmes around which the total care of the child can be attempted. Such arrangements also lead to unhygienic practices in handling and distribution of foodstuffs. We, therefore, recommend provision of a building or structure for feeding centres. In the rural areas including tribal regions, the village school or the

Panchayat Ghar could be utilised outside their normal working hours. There are plan programmes both in the Central and State Sectors which promote construction of school buildings, structures for mahila mandals, panchayat ghars and the like. Priority for locating these new buildings should be accorded taking into account the location of feeding programmes.

Integration of two feeding programmes of Social Welfare Department

3.13. The Planning Commission has suggested to Department of Social Welfare that the two programmes of nutrition feeding implemented by the Department of Social Welfare for pre-school children required to be integrated. The major programme of the Department relating to children of the age group 0-6 years in tribal areas and urban slums are administered by the State Governments directly. The other programme of nutrition feeding is organised through balwadis by certain All India bodies. We suggest speedy integration of these two programmes of the Department of Social Welfare.

Other Feeding Programmes

3.14. In addition to two special feeding programmes for pre-school children of Social Welfare Department, there are other programmes catering for the same target groups. One of them is the Applied Nutrition Programme and the other is the Composite Programme for women and pre-school children. These are briefly described in the next few paragraphs.

Applied Nutrition Programme

3.15. The Applied Nutrition Programme is primarily an educational effort and aims to develop progressively a coordinated and comprehensive national programme of education and training in applied nutrition and related subjects with the object of establishing in effect a field service to improve local diets through the production, preservation and use of protective foods. One of the main components of the programme is demonstration feeding. By the end of 1970-71, demonstration feeding was carried out for over 10 crore 'child days' and 1.7 crore 'women days'. Special demonstration feedings are held for about 200 days in a year and the number of beneficiaries varies from 20 to 30 at each centre. The programme does not envisage establishment of regular feeding centres. The number of villages covered

by the Applied Nutrition programme till 30th March 1971 was 61,955 in 597 reporting blocks. The feeding is carried out at balwadis, health centres, mahila mandal buildings or similar centres. At the State level usually the Department of Community Development is responsible for implementing the programme.

3.16. Applied nutrition programme secures major portion of financial resources from the respective plan schemes under agriculture, animal husbandry and allied activities. Special Central assistance provided by the Centre for the programme takes care of items which though vital for the success of the programme are not covered by substantial plan schemes. In Fourth Five Year Plan, special Central assistance of Rs. 39,000/- per block per annum is not tied up with any matching contribution by the State Governments. Such assistance is available to a block for five years for digging of wells in school gardens, maintenance of irrigation facilities in schools and assistance to small scale poultry units run by schools or associate organisation. State Governments have to provide on an average Rs. 51,000/- per year per block for the related plan programmes.

Composite Nutrition Programme

3.17. The other programme of Community Development Department is the Composite Nutrition programme. Realising that the Applied Nutrition programme and the Family and Child Welfare programme would be able to cover only limited area during the Fourth Five Year Plan the Composite Nutrition programme was initiated to cover the residuary area. The programme is expected to provide necessary climate and infra-structure for Applied Nutrition programme and family and child welfare programmes to be extended in future. The core of this programme is nutrition education and its particular application is through demonstration feeding. The programme is to be implemented by State Governments through official and non-official agencies. The existing institutions of Mahila Mandals and Balwadis are to play a leading role in implementation at field level. The programme has five components:

- (1) Nutrition education through mahila mandals;
- (2) strengthening the supervisory machinery for women's programmes;
- (3) encouragement of economic activities by mahila mandals;

- (4) training of associate women workers; and
- (5) demonstration feeding.

Demonstration Feeding

3.18. Demonstration feeding is a major component of the Composite programme and is an aid for the nutrition education activities. The coverage under demonstration feeding will gradually grow in scale beginning in the first year with one balwadi in each of the selected 375 blocks till five balwadis are covered in each of these blocks at the commencement of the final year of the plan. Thus at the end of the Fourth Five Year Plan, 1875 Balwadis in 375 blocks will function in the country. Provision is made for feeding 80 women and children in age group 0-5 each day for 25 days in a month. At its peak, demonstration feeding component will cover 1.5 lakh beneficiaries each day.

Training

3.19. The programme is implemented through the Department of Community Development and Panchayati Raj or Social Welfare Department of State Governments. The programme is run through voluntary agencies and members of Mahila Mandals who are trained for the purpose. The training effort in the Composite programme takes into account requirements both of associate women workers and balwadi workers. Associate women workers numbering 18,000 are to be trained during the Fourth Plan period as well as adequate number of balwadi workers. It is expected that 10,000 Mahila Mandals will be covered under the incentive award component of the Composite programme for encouragement of economic activities undertaken by them.

Field Level Staff

3.20. The programme is supervised by Directorate of Women's programmes at State level and District Women Welfare officers in the districts and the supporting staff of Mukhya Sevika/Gram Sevika at the block and village levels. All these functionaries form an integral part of the development machinery at the State level. Supervision and guidance is provided by Development Commissioners in the States. The State Governments are being given 100% grant from the Centre at the rate of Rs. 5,940/- per feeding centre. This amount includes Rs. 500/- per centre as subsidy towards kitchen equipment.

Fifth Five Year Plan

3.21. The purpose of referring to the variety of feeding programmes addressed almost to the same target groups in a fairly detailed manner above is to bring out the fact that there is much that remains to be done in improving the structure, organisation and methods of feeding pre-school children, pregnant women and lactating mothers in the country. This is an essential and urgent task awaiting implementation in the Fifth Five Year Plan.

PART II

POLICY ISSUES

Single Administrative set up for Feeding Programmes

3.22. Three departments of Government of India are primarily involved in feeding programmes for pre-school children. The largest single feeding programme is operated by Department of Social Welfare. The pre-school feeding component of mid-day meals programme as we have already noted in Chapter II, covers more than a million children. There is a substantial element of feeding of pre-school children under the auspices of Applied Nutrition Programme and Composite Nutrition Programme of Urban Department of Community Development. The question whether we should recommend a single administrative set up to deal with various pre-school feeding programmes in Government of India has been examined by us. There are many factors which might support such an integration. For instance, there is practically no difference in the calorific and protein value of food served as supplemental feeding in various programmes. Organisational effort and type of machinery that are required for implementing these programmes also do not differ considerably from each other. There is the further advantage of effecting possible economy in bringing together these diverse programmes under a single agency. These advantages, however, should be weighed against difficulties arising out of such an integration. School teachers are rendering voluntary service wherever mid-day meals programme is being implemented for cooking and serving meals. Such services can only be expected if these programmes are run through the Education Departments of States. The Social Welfare De-

partment at the Centre has vast experience and intimate contact with a number of voluntary agencies. This specialised experience is denied to other departments. A programme such as the Special Nutrition Programme for children depends to a large extent on the active cooperation of thousands of voluntary agencies. The cost of food material varies from programme to programme as could be seen from the following data :-

Special Nutrition programme	18 paise per child per day
Balwadi feeding programme	15 paise per child per day
Mid-day meals programme for school children	19 paise (approximately) per child per day

Taking into account these factors, an overall integration of pre-school feeding programmes does not appear to be attractive.

Logistics of Supply

3.23. Broadly, the logistics of supply of foodstuffs for feeding programmes in the country may be divided into three categories. The first category covers imported foodstuff or centrally purchased food in dry form which is stored in central godowns and distributed through various means of transport. The second category in operation is the central kitchen in which foodstuffs are cooked and the cooked food is taken in vehicles and distributed to feeding centres around such central kitchens in containers. This process is undertaken daily. The third category relates to programme of feeding where food is secured from local sources and cooked and distributed at the feeding centre itself. There are variations of second category in which food in the form of ordinary bread or fortified milk bread manufactured at a central institution such as Modern Bakeries in each big city is delivered through special channels of distribution at feeding centres.

3.24. By and large, imported CSM or locally produced Balahar is the main foodstuff distributed under category one described in the previous paragraph. These products are not pre-cooked and, therefore, have to be turned into recipes which will suit local taste and resources. Imported CSM and other food material gifted by CARE, is received at principal port towns and is handled at the ports either by Food Corporation of India or by agencies of State Government. From ports, food material is transported either by rail or by trucks direct to central

godowns from where they are again distributed in smaller quantities to block godowns or to village centres. Many difficulties arise in handling of these gift articles at ports and in their transport, storage and distribution. They are being dealt with in another chapter.

Man-power for Central Kitchens

3.25. Central kitchens which have been tried out in a limited way in Tamil Nadu through gifts of equipment, made by CARE, have certain clear advantages. They ensure that food is cooked clean at a central place and transported in neat and hygienic containers fresh and hot for consumption by beneficiaries. There are, however, exceptions. We have noticed in a central kitchen we visited that for want of adequate labour force and the needed mechanical equipment, CSM used for making *Uppuma* was infested. The Committee would like to recommend provision of sufficient manpower for cleaning all the food material at central kitchens before it is cooked. One of the main items of cost which overshadows the principal advantages of the central kitchen is that of transport. We noticed, for instance, that the vehicle which transported the cooked *Uppuma* to the surrounding centres from Chromepet near Madras city had to cover a distance of 80 to 100 kms every day. Both in terms of fuel costs and obsolescence of the vehicle the arrangement is unfavourable, especially because the cooked food has a considerable portion of water in it. If a dry foodstuff could be distributed to be later processed, considerable saving would be effected in transport. Of course, if that dry foodstuff is also pre-cooked, there would be even greater advantages.

Locally available Foods

3.26. One of the neglected but effective programmes with good potential is the use of locally produced food material for use in feeding programmes. In many feeding centres, however, it may not be possible to collect an adequate quantity of the requisite cereal, pulses and vegetables. Apart from not having net agricultural surpluses locally, these centres may lack in other facilities. Nevertheless, if the country undertakes feeding programmes for pre-school children, pregnant women and lactating mothers on a large scale in the near future, as part of a general strategy of nutrition development, more attention will have to be devoted to enhance availability of locally produced foods for use in feeding programmes. Dr.

C. Gopalan Director of the National Institute of Nutrition has been experimenting with use of local foods in a feeding programme in a limited area with some success. In the State of Mysore, the Social Welfare Department is making an attempt in this direction. There are other isolated attempts in the country for using locally produced material in feeding programmes. But these are exceptions rather than the rule. By and large, efforts by Government and voluntary agencies are directed towards the use of easily available food materials whether imported from abroad such as CSM or locally produced ones like Balahar so that they could be transported, stored and distributed with convenience.

Multi-purpose Food

3.27. The Central Food Technological Research Institute, Mysore has commended use of local foodstuffs and local recipes with the addition of multi-purpose food (MPF) which was developed by the Institute. The Committee however, noticed that reaction of beneficiaries to the taste and flavour of multi-purpose food was not uniform in various parts of the country. In West Bengal, for instance, we were told that the flavour of MPF was not welcome.

Role of Road Transport in Distribution

3.28. One of the interesting methods of distribution of food-stuffs used in feeding programme noticed in Bangalore deserves mention. Modern bread used in feeding programme of Social Welfare Department in slum areas in the city is being supplied to the Government Dairy from where along with the bread, MIL-TONE produced in the dairy is sent out through the Dairy's usual channels of distribution to the distribution centre. Such innovations will have to be attempted in our view on a wider scale in various places. Another feature we noticed is transport of bread through regular passenger trains by Modern Bakeries to places upto 300 miles. Such process of transportation, if it could be arranged in consultation with rail and road transport authorities, could save considerable funds on specialised transport arrangements exclusively attending to distribution of these foodstuffs.

Nutrition Education

3.29. One of the weakest aspects of feeding programmes currently in operation is nutrition education. We noticed

that even officers of the block level in some States were not aware of the educational aspects of the feeding programmes. There appears to be good case for imparting regular training in health, hygiene and nutrition education aspects to staff employed at different levels in feeding programmes.

Simplification of Accounts

3.30. In view of the difficulties of field level functionaries in maintaining accounts continuous efforts are needed in rationalising and simplifying feeding accounts. The attempt should be to evolve simple and easily understandable set of proformae. For this purpose assistance of experts in accounting procedures may be obtained.

Patterns of Assistance of Feeding Programme

3.31. The Committee would like to observe that the two schemes of Social Welfare Department supplemented by outright grants have been availed of with greater enthusiasm by State Governments than other programmes such as the Composite Nutrition Programme for women and children and the mid-day meals programme for school children. The administration and transport costs for running these programmes are fully borne by State Governments. Except for responsibilities of leadership and coordination, the Union Education Department has at present no financial burden attached to the mid-day meals programme. If Special Nutrition Programme is extended to cover rural areas, there is a possibility of State Governments availing of the advantageous terms of central assistance of this programme and consequently shifting the beneficiaries from the pre-school component of mid-day meals to this programme. In the past State Governments have discontinued feeding programmes for pre-school children after severe famine conditions were got over and Central grants were stopped. We would therefore recommend that Special Nutrition Programme should confine, itself in future to the age group 0-5 years only, if in any locality, the mid-day meals programme caters to the age group of 5-6 years. Besides, creation of a focal point of feeding other than the school for the age group 5-6 will be avoided under this arrangement thus encouraging enrolment in schools.

Benchmark Studies

3.32. Baseline studies of anthropometric measurements and other important data were not made in regard to beneficiaries of feeding programmes including Applied Nutrition Programme and Composite Nutrition Programme in the past when they were first introduced. Subsequent evaluation of these programmes can be meaningful only with reference to data available from such baseline studies. In the absence of such benchmark surveys it becomes difficult to make necessary corrections and improvements in the programme. We, therefore, suggest that wherever any programme calls for a benchmark survey the funds for the purpose should be provided in the initial section of the scheme itself and technically competent persons should be requisitioned to undertake such surveys.

CHAPTER IV

PROGRESS REPORTING ON NUTRITION FEEDING PROGRAMMES

The original terms of reference of the Committee did not cover progress reporting on nutrition programmes. In the meeting of Nutrition Coordination Group of Planning Commission held on 31st March, 1971 it was decided that the Committee should undertake to collect information on availability of current data, flow of information and ways and means of progress reporting on feeding programmes.

Objectives of Progress Reporting

4.2. The flow of data for policy formulation and for effective progress reporting on nutrition programmes has been inadequate. From the point of view of planning and development, it is essential that State authorities should know from time to time not only the progress of expenditure on plan programmes of nutrition but also physical results achieved. Periodical appraisal should help in effecting modifications and mid-course corrections in the programmes. The objective of progress reporting would, therefore, be to keep a watch over implementation of schemes from time to time. To be of value, progress reports should be framed keeping in view the objectives of each scheme.

Programmes

4.3. Nutrition programmes undertaken by various Departments of Union Government, with which we are concerned are listed below :—

Name of the Programme	Name of the Department implementing the programme
1	2
(a) Mid-day Meals programme.	Department of Education
(b) Nutrition Feeding of pre-school children through balwadis.	Department of Social Welfare.

1	2
(c) Special Nutrition Feeding Programme for children in the age group 0-6 years and expectant and nursing mothers in slum and tribal areas.	Department of Social Welfare.
(d) Applied Nutrition Programme	Department of Community Development.
(e) Composite Nutrition Programme for women and children.	Department of Community Development.

Existing Arrangements

4.4. The Ministry of Education and Social Welfare, Department of Education is concerned with mid-day meals programme although its actual implementation since the Third Five Year Plan remains with state governments. The objective of the programme is two-fold viz., to improve nutrition levels among school children in general and in particular to make up for deficiency in protein, to increase school enrolment and to encourage regular attendance. The programme mainly caters for children in the age group 6-11 years. By the end of 1968-69 mid-day meals programme in school covered about 11 million beneficiaries. This number is expected to go up to 14 million by the end of Fourth Plan. Department of Education gets the progress reports through a questionnaire issued to all States participating in the programme. State Governments usually secure this information from headmasters of schools serving mid-day meals. The progress report is furnished once every quarter by State Governments to the Centre. A copy of the questionnaire issued by the Ministry of Education is at Annexure I.

4.5. The Union Department of Social Welfare is implementing the following nutrition programmes :—

- (a) Nutrition feeding of pre-school children through balwadis
- (b) Special Nutrition Feeding programme for children in the age group of 0-6 years and expectant and nursing mothers in metropolitan slums and tribal areas.

The object of the first programme is to provide nutrition to children in age-group 3-5 years through the organisational

machinery for family and child welfare programme, women welfare and balwadis. The object of the second scheme is to provide supplementary nutrition to children in age group 0-6 years in tribal areas and in urban slum areas and also to expectant and nursing mothers to tackle malnutrition and under-nutrition. The balwadi scheme contemplates supplementary feeding to the extent of 300 calories and 15 grams of protein per feed for 250 days in a year for children attending balwadis and day-care centres. Department of Social Welfare has framed quarterly and annual returns on data collection for the pre-school age children at the balwadis where this scheme is in operation. A copy of this proforma is at Annexure II. A copy of the proforma for obtaining progress reports from State Governments on special nutrition programme for tribal and slum areas is given at Annexure III. When the two programmes are integrated, as it is now envisaged in this report, the proformae on progress reports will undergo necessary changes.

4.6. Department of Community Development of Government of India is concerned with the following schemes :—

- (1) Applied Nutrition Programme
- (2) Composite Nutrition Programme for women and pre-school children.

Applied Nutrition Programme emphasises nutrition education through production of nutritive foods and through demonstration feeding. A copy of the proforma prepared by Union Department of Community Development to collect information on this programme is at Annexure IV. Reports received every quarter from the blocks are processed at state headquarters and a consolidated reports is sent to Union Department of Community Development. At village level, data are collected by gram sevaks/gram sevikas under the supervision of extension staff. The aim of the composite programme for women and pre-school children is to organise demonstrations on nutrition education and allied fields through mahila mandals and balwadis. The scheme operates in rural areas, not covered by applied nutrition programme of the Department of Community Development. The programme is particularly directed towards vulnerable groups and weaker sections of the society. It has five components out of which two are in the

state sector, namely nutrition education through mahila mandals and strengthening of the supervisory machinery for women's programmes. The other three components *i.e.* encouragement of economic activity by mahila mandals, training of women workers and demonstration feeding are in Central sector. Special officers to implement the programme at state level have been appointed in most States. The department has framed a proforma to collect quarterly progress reports on the scheme from the state Governments. A copy of proforma is at Annexure V.

Periodicity of Progress reports

4.7. The question, whether or not, it is necessary to collect progress reports on a monthly basis or more frequently was considered by us. We feel it may not be necessary to collect information on a daily or a monthly basis. It is adequate if reports on nutrition feeding schemes are furnished to Government of India either quarterly or half yearly.

Need for uniform Pattern

4.8. Various supplemental feeding programmes are being implemented by Departments of Education and Social Welfare at the Centre. We may have to move gradually to set up certain uniform standards and patterns for progress reporting on all feeding schemes. It would be meaningful to adopt the number of 'child days' or 'women days' on which feeding was carried out as the unit for progress reporting. The concept of child days has been evolved by a simple process of multiplication of the number of beneficiaries by the number of days they were fed. The proforma should be simple and should contain columns showing number of beneficiaries, feeding days, quantity of food supplied, type of food served and cost of food supplied per child per day. The existing proforma used for collecting progress reports on the Special Nutrition Programme in tribal and slum areas given at Annexure III may be considered for adoption by Central and State Governments.

Centre for collection of Statistics at Block Level

4.9. As pointed out earlier, each Department has its own arrangements for obtaining progress reports and for reviews thereon from State Governments as well as from their own field level functionaries. The question of setting up an organisation

or a centre for collection of information at the field level was examined by us. We are of the view that it is necessary to set up a small centre for collection of data relating to various nutrition feeding schemes, preferably at the block level. Each feeding centre, would furnish information to the block preferably once a month to such a centre. Each block may be provided with one assistant to coordinate this information and forward to state headquarters. Such a centre may function as part of the administrative machinery of the community development block level. We are of the view that scheme itself should be financed by the Government of India during its operation in the first five years.

Qualitative appraisal of Progress Reports

4.10. The progress reports received from the blocks will have to be examined at state level and discrepancies rectified before sending them to Government of India. A qualitative appraisal of the progress of each scheme should also accompany the consolidated statements from the state after they have been examined by the state level Nutrition Coordination Committee. One of the functions that we envisage for the State Committee is to evaluate the progress reports on nutrition programmes from time to time. The role of these Committees has been discussed in Chapter VII of this reports.

Delays in submission of Progress Reports

4.11. At present, delays in submission of progress reports ranges from three to twelve months. It is necessary that progress reports should be furnished in time not only for a periodical appraisal of the schemes, but also for modifications if necessary in their implementation.

CHAPTER V

RESEARCH AND DEVELOPMENT

Malnutrition and other aspects of Environment

Recent researches emphasize the role of malnutrition and under-nutrition as serious hazards to growth of children, particularly infants and pre-school age children. Special feeding programmes for giving supplemental food to pre-school children have been in existence for a number of years but it is only in the Fourth Five Year Plan that such feeding programmes have been recognised as part of an integrated nutrition programme. Attention in recent years, has therefore been focussed rightly on the most critical period in the child's life namely, nine months before birth and three years after birth. The Committee has recognized that malnutrition in children cannot be dealt with in isolation without tackling matters relating to hygiene, environmental sanitation, communicable diseases and ignorance about matters relating to health and nutrition.

Research and Development Effort for Nutrition Feeding to be taken up on an Extensive Scale

5.2. Studies undertaken by the Indian Council of Medical Research in different parts of the country have shown that diets of pre-school children are deficient in calories, vitamin A and calcium. We have also pointed out elsewhere in this report that nutrition education is a weak link in the pre-school feeding programmes. To ensure healthy growth of the child, we feel that research in and development of nutrition feeding should be taken up on an extensive scale. Such research effort should encompass not only nutritional variables but socio-economic and socio-psychological variables relating to eating habits. An area of research which requires priority is the communication of right ideas on hygiene, environmental sanitation and malnutrition to the mother and the child. So far this area of endeavour has received limited investment. We suggest that operating departments should set apart funds for research programmes relating to their fields in their annual budgets.

Orientation of Agricultural Development Plan

5.3. The Agricultural production plan should be oriented towards ensuring supply of adequate and sufficiently nutritive food for the child. In any such effort, both local research and local finance will play an important role. We are of the view that no countrywide scheme for feeding children can be sustained on tax revenues of the Central and State Governments. Voluntary donations and gifts should be forthcoming as well as resources of panchayati raj institutions. The effort should be to meet all costs of feeding programmes not so much in the shape of cash as of commodities locally grown and contributed for use in the programme. Such contributions will include, for example, produce from kitchen gardens in schools and orchards in the land owned by the village community.

Research Oriented to local conditions

5.4. Research has to be organized in small units such as a district or a group of districts. Two essential requirements of such research would be compactness and homogeneity of agro-climatic conditions. Institutions best suited to organize such areawise research are agricultural universities and national institutes of research like the National Institute of Nutrition, Central Food Technological Research Institute and Indian Agricultural Research Institute. The object of research would be to evolve local patterns of production which would yield cheap and nutritious foods. Such research should lead to self-reliance in nutritional programmes. Both research and extension would have to be oriented to local conditions with a view to reducing costs. Extension effort would have to be carried out through regular community development staff and through special functionaries where necessary.

Food stuffs for Feeding Programmes

5.5. Future developments in special feeding of the child will depend largely on the form in which the food will be provided. Acceptability of the food as it is distributed and the practicability of cooking or processing it before consumption are important. Uncooked foodstuffs are available more easily and can be transported more comfortably than cooked foods although the latter have a ready acceptability. The problem of cooking at the distribution centre presents difficulties. For instance, when the teacher is asked to cook for feeding

programmes, it may lead to neglect of his normal work. Lack of proper accommodation and other limitations also may be a constraint on cooking. In such cases, development of a central kitchen for a number of feeding centres may offer a solution particularly in densely populated areas. Another solution might be some form of pre-cooked or other suitably processed nutritious food including biscuits and snacks which would be easy to transport and find ready acceptance with the child. Considerable experimentation and research needs to be done in this field with reference to local conditions.

5.6. We understand that one of the defects in the existing feeding programmes for pre-school children is that it served more as a 'substitute' than as a 'supplement' to regular meals. The implications of such development-domestic, social and financial would have to be studied and solution found. In all such cases, there is urgent need to educate the mother along with feeding of the child.

Lack of Data of a non-medical nature

5.7. Nutrition research in India until recently was directed more towards medical side of nutrition than towards other aspects such as production, processing and supply of foodstuffs. Major part of research work in nutrition was being carried out in medical institutions, resulting in large areas not covered by research and development in other fields. For instance, we noticed lack of consistent base line data of a non-medical nature, although data on national average consumption are available for the population as a whole. Patterns of consumption for specific age groups communities, regions are not readily available. Data are limited on well balanced diets using locally available low cost foods. We are informed that Department of Food in Union Ministry of Agriculture will shortly commence a research programme for linear programming of low cost nutritious foods. There is considerable scope for such research effort in future. Another area where effort has been lacking in the past is the study of methods of communication to effect improved dietary practices. We welcome in this regard CARE's special programme of study on the nutrition communication process. The project contemplates intensive research in representative areas for data on nutritional variables and socio-economic and socio-psychological variables relating to eating

habits. Such studies if conducted on a wide scale would throw considerable light on effectiveness of alternative campaigns in nutrition communication.

Project Poshak of CARE

5.8. We note another project of CARE known as Project Poshak whose main purpose is to evaluate the feasibility of the concept of "take home" instant nutritious foods utilising fully precooked commodities for children upto the age of three years and pregnant and lactating women. The operational difficulties of "take home" feeding have to be studied and it has to be assessed whether cost of such feeding would bear comparison with conventional centre-based feeding programmes.

Tamil Nadu Nutrition Survey

5.9. Government of Tamil Nadu and Union Department of Food together with aid from abroad are conducting a study of nutrition systems operating in Tamil Nadu. This project will concentrate on the nutrition implications of (i) food production, processing and delivery system in rural and urban areas; (ii) education and attitude of rural and urban areas; (iii) personal and environmental hygiene; and (iv) Government's incentives and dis-incentives and decision making process as they affect the fore-going system. Nutrition education, health programmes, feeding programmes, new food product designs and related activities will be evaluated as a part of an integrated system under the study. The study when completed, is expected to throw light on many aspects of nutrition development, particularly production, processing and delivery systems.

Success of MILTONE

5.10. The success of the Central Food Technological Research Institute in evolving vegetable toned milk, MILTONE and its use in a limited way in pre-school feeding programmes have attracted attention. It has been found that MILTONE can be made and supplied at a price 15-20% cheaper than that of toned milk i.e. milk toned with skimmed milk powder and about 25-30% cheaper than pasturized full fat milk. Sterilized MILTONE has an additional advantage that it can be stored with refrigeration for nearly 3 months and is cheaper than many of the bottled soft drinks. There are programmes for expansion of production of MILTONE in the Fourth Plan of Union Department of Food. We would welcome such expansion so that

the slender fresh milk resources of the country are extended in order to feed the pre-school child in various parts of the country.

Location of Feeding Centres

5.11. It is necessary that locations of centres for feeding programmes of several departments and agencies of Government are not too widely dispersed. Utilisation of locally available nutritious foods becomes difficult in the face of such a wide dispersal. Feeding programmes in rural areas to the extent, it is feasible, should be located close to each other so that the results of efforts made in the local production of nutritious foods could be shared by all concerned. The production component in some Applied Nutrition Programme areas are reported to be successful resulting in increases in availability of nutritious foods locally. In areas where feeding programmes of various departments are located in proximity to each other, production of rich protein foods such as soyabean would have to be popularized through local extension agency. Consumer education through demonstrations would also help in this regard. Similarly State farms in such cluster areas could play a significant role in production and propagation of soyabean and other protein-rich crops. A link has therefore to be forged between state farms and local efforts directed towards feeding programmes.

CHAPTER VI

TRANSPORT FOR AND ADMINISTRATION OF FEEDING PROGRAMME

Introduction

Problems relating to transport, storage and administration of feeding programmes have assumed importance in recent years. Till recently feeding was confined to schools on account of their widespread availability and the institutional base they offered to control and supervise feeding. As already explained elsewhere in this report, Government of India have expanded supplemental feeding operations to include pre-school children and expectant and lactating mothers. These groups have been identified in the Fourth Plan as the most vulnerable categories of the population from the point of view of malnutrition. This phase of expansion has led to a creation of a over 15,000 centres for feeding under the special nutrition programme of Union Department of Social Welfare alone.

Movement of food Materials from port Schools.

6.2. Under present arrangements while the cost of materials and shipment are borne by CARE, State Governments are meeting the expenditure on clearance of food consignments from ports, on transportation by rail and road and on storage, distribution, cooking and serving of meals. The bulk of CARE commodities is transported by rail. From railheads food commodities are carried by trucks to district godowns and then to block offices where they are stored in godowns. CSM arrives in 50 lb. packs specially designed for varying climatic and storage conditions. Most schools require fresh food consignments every month or two, because of limited storage facilities. In areas where there are heavy monsoon rains and only a small quantity of food can be safely stored, securing fresh supplies over muddy roads is a problem. Transportation of food to schools is by trucks, bullock carts and sometimes headloads.

Transport arrangements made by States

6.3. Each year CARE imports about 320 million lbs. of food through ports of Bombay, Cochin, Madras and Calcutta. This is cleared by Food Corporation of India with the assistance of CARE's port officer who supervises the clearance and arranges despatches to district Warehouses. Some States do not avail themselves of the services offered by the Food Corporation. Information about the existing arrangements made by the States for transportation of food from ports is at Annexure 1. It will be seen from these details that State Governments have adopted a variety of arrangements for speedy transportation of food stuffs.

Inadequate storage facilities

6.4. Inadequate storage facilities have led to deterioration of foodstuffs used. As food received from abroad remains at various godowns for several days and occasionally for months, before it reaches schools, some of it becomes stale. Further, the godowns are sometimes infested with pests. We recommend that construction and maintenance of godowns at various levels is important to ensure proper storage of foodstuffs in good condition and to avoid wastage. We suggest, therefore, a phased programme for building godowns all over the country as part of the integrated programme of nutrition in the five year plans.

Administration of Mid-day Meals in Programme

6.5. Cooperation among CARE, Government of India and States at all levels has been a noteworthy feature of the mid-day meals programme. At State level CARE and State Government plan the number of school children who can be covered by the programme. State Governments have appointed special officers to liaise with State Administrators of CARE. At district level District Education Officer supervises the entire operation. He works in close coordination with block development officers who are directly involved with the mechanics of the programmes such as storage, disbursement and shifting of stocks. The Education Officer also maintains close coordination with education extension officers who maintain records, visit the schools and notify the block development officers for additional supplies of food. In some States, village panchayat contributes funds for condiments and ensures that students

are fed daily. The final administrative link is the headmaster. He is directly responsible for having the food prepared and distributed to school children.

Central Kitchens and Godowns in Tamil Nadu

6.6. A new approach to transport and delivery of food materials is seen in the Tamil Nadu Central Kitchen Project. This project is designed to centralise all activities to minimise delays and inefficiencies in normal feeding programmes. Along with development of Central Kitchens, large godowns have been built to store food. A Vehicle Maintenance Centre with sixty six vehicles has been established to deliver food daily to surrounding areas. State Government of Tamil Nadu has proposals to construct 10 Regional Godowns, approximately one for every 160 kms (100 miles). These godowns are likely to store food commodities for about three months for use at the feeding centres.

Other experiments in distribution of Processed Foods

6.7. The State Government of Andhra Pradesh are considering a proposal to establish a factory to produce processed food by extruder technology. Whereas the Tamil Nadu Central Kitchens are preparing plain cooked food, this factory will produce dry foods which could be stored for use for over a month. State Government of Maharashtra undertake a large scale feeding programme with cooperation of CARE and Sadguru Seva Sangh Trust in some famine areas in 1971. The distribution of Sukhadi, a local recipe, to adivasis was organised in 1132 schools and 166 other centres. The cost of each ration of about 100 grams was worked out at about 5.75 paise exclusive of cost of raw materials supplied by CARE.

Problems in Tribal Areas

6.8. Large feeding programmes in tribal areas for pre-school children are operating in Madhya Pradesh, Orissa and other states. Problems in these areas mainly relate to communication, storage and shelter for cooking. Programmes such as Central Kitchens which rely on availability of transport for daily movement of food are inapplicable in remote tribal areas. During 1971-72, about 38 godowns were taken up for construction in tribal areas in Madhya Pradesh. It is necessary that problems

of storage and delivery of food materials or feeding programmes in tribal areas are specially gone into and efforts made to solve them expeditiously.

Funds available under Rural Employment Scheme

6.9. We have noticed that class rooms are being used for storage making it necessary, occasionally to conduct classes outside. Adequate storage facilities should be provided in schools to conserve class room space. We feel that the funds now being made available under crash scheme for rural employment could be utilised fruitfully for building storage facilities in existing schools.

Transport cost for Special Nutrition Programme

6.10. Transportation cost for special nutrition programme implemented by Union Department of Social Welfare has been worked out on the basis of the experience with the mid-day meals programme for school children. This covers the cost of transport from port to the feeding centre. The cost of transportation and cost of administrative overheads for the special nutrition programme are given below :—

- (i) Cost of transportation 2 paise per child per day
- (ii) Cost of administrative overheads 3.5 paise per child per day

Recently, the cost of transportation and administration was merged in a single overhead of 5½ paise per beneficiary per day.

6.11. We have mentioned in an earlier Chapter that the programme of administration of feeding materials should be handled by the bulk user department in each State. We would like to emphasise that the transport and distribution should remain the responsibility of a single Department in each State.

6.12. The special nutrition feeding programmes being implemented by the Department of Social Welfare was started in 1970. It is estimated that Fourth Plan provision for this programme would be about Rs. 60 crores. We understand that suitable models for administering this programme as part of a package of services for early childhood is being considered. Coordination of activities of Department of Social Welfare on the one hand, and those of Health and Family Planning on the other, is essential for carrying out this task.

CHAPTER VII

COORDINATION AND EVALUATION

(i) COORDINATION OF FEEDING PROGRAMMES

The Committee has been asked to suggest means of co-ordination of pre-school feeding programmes undertaken as part of mid-day meals programme with that of feeding programmes of Department of Social Welfare. Such coordination could be effected in respect of beneficiaries, of food stuffs and of the agencies implementing them.

Coordination in terms of Beneficiaries and of Food stuffs

7.2. Coordination in regard to beneficiaries is necessary because the same beneficiary could secure food under more than one programme, although instances of this type are rare. The category of beneficiaries under mid-day meals programme comprises children in primary schools generally in the age group of 6-11 years. Under special nutrition programme children in the age group of 0-6 years and expectant and nursing mothers in city slums and tribal areas are the beneficiaries. Co-ordination is also possible in respect of foodstuffs supplied under various programmes of pre-school feeding even though the types of foods served are varied. Some of the more important items of food supplied are *Uppuma*, porridge, *Halwa*, *Uppittu*, bottled milk, biscuits, bun, *Kanji* and Milk Bread. Coordination in regard to supply of foodstuffs should not be difficult as the main ingredients of food are supplied at present by the same agencies.

7.3. Several departments and agencies of State Governments are involved in implementing feeding programmes. Some of them are :—

1. Education Department
2. Social Welfare Department including Tribal Welfare Department
3. Development and Panchayati Raj Department

4. Health and Family Planning Department
5. Department of Industry and Labour, and
6. State Social Welfare Board.

Coordination at State Level

There are also several voluntary agencies engaged in this work such as mahila mandals, youth clubs Harijan Sevak Sangh, Adimjati Sevak Sangh, All India Women's Conference, Indian Red Cross, Ramakrishna Mission, Lion's Club, Prosperity Brigade etc. In regard to overall coordination of nutrition programmes for the country as a whole, the Fourth Plan Document contemplates that "the Planning Commission will have to provide the requisite means of coordination including review and evaluation". The plan also stresses the important role of co-ordination of nutrition programmes in each State. The success of the programmes of supplemental feeding will depend on the effectiveness of machinery in States, not only for implementation of individual programme but for their integration and coordination.

Constitution of State Coordination Committees

For this purpose, the Planning Commission has recommended constitution of a Coordination Committee in each State with representatives of all departments concerned with nutrition programmes. A copy of the letter addressed by the Planning Commission to State Governments is at Annexure I. On this recommendation of the Planning Commission, State Governments of Andhra Pradesh, Orissa, Bihar, Haryana, Gujarat, Jammu & Kashmir, West Bengal, Assam, Kerala, Mysore, Punjab, Tamil Nadu, Meghalaya, Madhya Pradesh and Rajasthan have set up State Level Nutrition Coordination Committees. We suggest that the remaining States should also constitute such Committees early. It will be necessary for these Committees to meet at least once a quarter. Similar Committees may be set up at district level.

Functions of State Coordination Committees

7.4. We envisage the following functions for State Level Coordination Committees for Nutrition :

- (i) to work out as far as possible uniform pattern of procurement, storage and distribution of foodstuffs;
- (ii) to avoid overlapping in setting up feeding centres and in coverage of beneficiaries;

- (iii) to lay down guidelines for effective supervision and implimentation of feeding programme by coordinating the functions and responsibilities of field staff presently appointed under different agencies;
- (iv) to work out in-service training programme from time to time for field staff as well as for voluntary organisations involved in implementation of feeding programmes;
- (v) to organise conferences and seminars from time to time on pre-school children feeding programmes;
- (vi) to prescribe proformae and obtain quarterly reports, regarding progress and to evaluate them from time to time; and
- (vii) to examine evaluation reports on feeding programmes and take quick decisions on them.

(ii) EVALUATION OF FEEDING PROGRAMMES

7.5. The Feeding Programmes of Department of Education, Social Welfare and Community Development have grown into sizeable dimensions in recent years. Programmes of supplementary feeding of children currently operating are given below :

Ministry/ Department	Programmes	Sector	Beneficiary coverage
Education	Provision of mid-day meals to primary school children,	State	11.7 million
Social Welfare	Supplementary feeding of pre-school children through Balwadis	Centre	2.13 lakhs
	Special feeding programme for children of 0-6 years in city slums and tribal areas	Centre	1.65 million
Community Development	Applied Nutrition Programme ¹	Centrally Sponsored	1184 C. D. Blocks
	Composite nutrition programme for women and pre-school children ¹	Centre/State	1 lakh (E)

¹There is a feeding component in these schemes.

E-Estimated.

7.6. The scheme for providing mid-day meals to primary school children has been in existence for about 15 years. It has expanded considerably since 1962-63 particularly with gift food commodities from CARE. The coverage of beneficiaries is expected to go up to 14 million children by the end of Fourth Plan. Similarly, the special nutrition programme of the Department of Social Welfare implemented in city slums and tribal areas, though of recent origin is a sizeable scheme considering the resources invested. There are at present about 15,000 feeding centres under the scheme in the States. It is estimated that in the Fourth Five Year Plan, the outlay on supplementary feeding programmes would be of the order of Rs. 300 crores, including the cost of food material used and expenses on administration and transport. It is, therefore, necessary that planning and implementing agencies and departments at the Centre and States should know from time to time the impact of such feeding programmes on beneficiaries as well as on the community.

Mid-day Meals Programme

7.7. We notice that there has been no systematic attempt to evaluate the mid-day meals programme. The need for adequate, purposeful and scientific evaluation of these programmes has been felt by some State Governments. State Governments of Gujarat and Andhra Pradesh, for instance, have conducted evaluation studies of the mid-day meals programmes. The evaluation conducted by the Government of Gujarat reveals that during 1966-67 only 72 per cent of the target beneficiaries were reached. The reasons for this inadequate coverage were non-acceptability of the meals served and meagre local contribution. Time spent on cooking food ranged from one to two hours. The supplies to schools were not continuous in a few cases. The evaluation study by Government of Andhra Pradesh has pointed out that a separate room, wherever possible should be provided even at the village for storing the commodities supplied for the feeding programmes. The report has also stated that food is being cooked in open places, often underneath a tree in a number of places. It is necessary that certain minimum facilities should be made available in schools used as feeding centres under mid-day meals programme. It has been also observed that only a few feeding centres provided part-time cooks. As a result, mostly students and teachers themselves do the cooking. The amount of time spent on cooking is estimated to be about two hours and a half per day. The transportation of material from the block to school is another bottle-

neck facing the programme in some areas. This report has suggested that incentives should be given to headmasters to run this programme. Contributions from the community were inadequate. However, the report noticed favourable impact of the programme in poverty stricken areas. The satisfaction that is provided to the children, the slight improvement in health and nutrition evidenced through increased activities of children, regularity in attendance and economic relief it afforded to the parents, were observed in a great measure in poverty pockets as compared with relatively prosperous area.

Studies by Shri Avinashilingam Home Science College

7.8. Sri Avinashilingam Home Science College, Coimbatore has conducted a number of studies on the nutritional impact of school lunch programmes. These studies have pointed out the difference in weight increase, haemoglobin and red blood cell contents between children participating in school lunch programmes and these outside it. It was also noticed that there was positive changes in the dietary habits of children who were participating in the school lunch programme. A note on these studies is given at Annexure II.

Special Nutrition Programme

7.9. There is a provision for internal evaluation in the scheme of special nutrition programme implemented by Union Department of Social Welfare. It is stated that assessment of the implementation of the scheme will be taken up by supervisory staff of the Department. The scheme also provides for periodical evaluation to assess the impact of the programme on beneficiaries. For this purpose, the Block Development Officer is to arrange for a periodical medical examination of beneficiaries at the feeding centres. Each centre will maintain a register pertaining to height, weight, and other physical particulars of beneficiaries. In an earlier chapter, we have made reference to our impressions regarding the health aspect of these feeding programmes. By and large, the health aspect of the Special Nutrition Programme was found to be neglected. We have also noticed that evaluation of height, weight and other related anthropometric data of children have not been undertaken at feeding centres.

Applied Nutrition Programme

7.10. The Applied Nutrition Programme has been in existence since 1963. Under this scheme, demonstration feeding

is undertaken to promote nutrition education. Evaluation studies of Applied Nutrition Programme has been undertaken by the Programme Evaluation Organisation as well as by State Governments from time to time. There has, however, been no organised attempt to evaluate the demonstration feeding aspect of this programme on a regular basis.

Types of Evaluation

7.11. Evaluation can be broadly classified into two types : (a) internal evaluation and (b) independent evaluation. The objective of internal evaluation is to assist the administrator and the planner in regard to correct strategy and action in implementing the programme, Internal evaluation, however, cannot replace objective assessment and evaluation by an independent agency.

Independent Agency for Evaluation

We, recommend that an evaluation unit should be set up at the Centre for continuous evaluation of supplemental feeding programmes. Representatives of departments implementing these schemes as well as experts in the field will have to be associated with such a Centre not only to direct evaluation studies from time to time but also to review the reports and recommended action on them. It will also be necessary to formulate appropriate yardsticks for evaluation which are reliable and valid and at the same time simple and easily applicable to field conditions.

Other Agencies for Evaluation

7.12. Apart from the agency for evaluation that we have recommended universities and research institutions should be persuaded to undertake *ad hoc* studies on different aspects of feeding programmes.

CHAPTER VIII

SUMMARY OF RECOMMENDATIONS

Pre-School Children in Mid-Day Meals Programme

8.1 While 0-6 year is considered as the pre-school period, nearly 15-20 per cent of the age-group 5-6 years may already be in school though the compulsory school going age is six years. In streamlining feeding programmes, for pre-school children it is advisable to avoid catering for this group by two sets of feeding programmes. This can be ensured by confining pre-school children feeding programmes to age group 0-5 years, if the age group 5-6 years is covered in the mid-day meals scheme. (2.10)

[Please see also paragraphs 8.9 and 8.19]

8.2. In certain States, Panchayat Raj institutions in rural areas and municipalities and corporations in urban areas are administering school feeding programme. In Madhya Pradesh the programme is confined to tribal schools. It appears advisable in the interest of mid-day meals programme that administration of the programme should rest with a single department in each State. (2.11)

8.3. Assuming the number of feeding days in a year as 200 about Rs. 24.0 crores would be required in respect of food commodities for 119 lakh children now covered under the programme at the rate of 10 paise per meal per day. At present the States are spending about Rs. 6.4 crores on the programme. If the programme were to be self-supporting, the additional outlay required would be about Rs. 18 crores excluding expenditure on transport and distribution of foodstuffs. (2.16)

8.4. The States were urged to consider large-scale schemes to utilize land attached to schools more intensively with the help of State Agriculture Departments. Such an effort is yet to make an impact on feeding programmes. It should be intensified. (2.17)

8.5. Increased community participation is essential for placing the mid-day meals schemes on a permanent footing.

Participation of parents is also equally essential in a programme of this magnitude. If *mahila samitis/mahila mandals* are strengthened in each State, it may be possible to execute this programme at least partially through them in a period of 5—10 years. Panchayati Raj institutions can provide overall supervision in the implementation of the mid-day meals programme. State level nutrition coordination committee can also give leadership and guidance. If mahila mandals can take over the execution of the programme, the teacher will be relieved of the burden of cooking which is at present generally his responsibility. (2.19)

8.6. In States like Punjab and Haryana, we noticed children of age group 4-5 years voluntarily visiting the schools which are also feeding centres. It is obvious that there is scope for arranging regular pre-school classes for such children. The Committee was glad to hear that the Union Social Welfare Department has a scheme under consideration for attaching balwadis to primary schools. When the proposal is put into operation, about one million children of pre-school age now attending school feeding centres can receive pre-school education and health service apart from the benefit of nutrition. We would, therefore, urge implementation of the new scheme expeditiously. (2.21)

8.7. The number of feeding days generally ranges from 200-220. The National Institute of Nutrition is of the view that the number of feeding days in a year should be at least 250 to have the desired impact on the children. We suggest that this norm should be generally adopted. (2.23)

8.8. We have considered the desirability of retaining the pre-school feeding component in the mid-day meals programme for school children. There are certain advantages in such an arrangement. The addition of the pre-school children to school children beneficiaries helps in improving economies of scale in terms of storage capacity, cooking time, etc. (2.24)

8.9. The pre-school segment of mid-day meals programme of coordinated with the programmes of feeding of the Social Welfare Department, without much difficulty. In any village or town where there is a primary school and a centre for special nutritional feeding programme of the Department of Social Welfare, all the pre-school children should be fed at the latter centre. (2.26)

8.10. The health and educational aspects of the programme are not always receiving the importance they deserve. The additional advantage of educating the pre-school child available in

this programme should not be overlooked. It is necessary to inculcate the principles of nutrition both among the beneficiaries and the functionaries. From this point of view, we would recommend that demonstration feeding centres should be opened in schools in each state, fully equipped with model kitchens, utensils, etc., and adequate supply of drinking water. The existing facilities available for imparting nutrition education through mobile food and extension units of the Union Department of Food as well as through the demonstration feeding of the Applied Nutrition Programme and Composite Nutrition Programme conducted by the Union Department of the Community Development should also be fully utilised for the purpose (2.27).

Pre-School Feeding Programme of other Departments and Policy Issues

8.11. The major programme of the Department of Social Welfare relating to children of the age group 0—6 years in tribal areas and urban slums are administered by the State Governments directly. The other programme of nutrition feeding is organised through balwadis by certain All India bodies. We suggest speedy integration of these two programmes of the Department of Social Welfare (3.13).

8.12. The following suggestions may improve implementation of Special Nutrition Programme:—

- (i) immunisation programme for children and supply of drinking water should be adequately provided;
- (ii) in the rural areas including tribal regions, the village school or the Panchayat Ghar could be utilised outside their normal working hours. There are plan programmes both in the Central and State Sectors which promote construction of school buildings, structures for mahila mandals, panchayat ghars and the like. Priority for locating these new buildings should be accorded taking into account the location of feeding programmes;
- (iii) organisational machinery at ground level will have to be evolved to implement the programme without interruption;
- (iv) effective supervision, guidance and follow-up at different levels will have to be ensured for this programme; and

- (v) one of the weakest aspects of feeding programmes currently in operation is nutrition education. We noticed that even officers of the block level in some States were not aware of the educational aspects of the feeding programmes. There appears to be good case for imparting regular training in health, hygiene and nutrition education aspects to staff employed at different levels in feeding programmes.

8.13. In certain centres, the people resented immunisation being combined with feeding programmes. In such places, the State Government would have to take up the immunisation in a phased manner. (3.9)

8.14. The question whether we should recommend a single administrative set up to deal with various pre-school feeding programmes in Government of India has been examined. Taking into account various factors, an overall integration of pre-school feeding programmes does not appear to be attractive. (3.22)

8.15. The Committee would like to recommend provision of sufficient manpower for cleaning all the food material at central kitchens before it is cooked. (3.25.)

8.16. One of the neglected but effective programmes with good potential is the use of locally produced food material for use in feeding programmes. If the country undertakes feeding programmes for pre-school children, pregnant women and lactating mothers on a large scale in the near future, as part of a general strategy of nutrition development, more attention will have to be devoted to enhance availability of locally produced foods for use in feeding programmes. (3.26)

8.17. Modern bread used in feeding programme of Social Welfare Department in slum areas in Bangalore city is being supplied to the Government Dairy from where along with the bread, MILTONE produced in the dairy is sent out through the Dairy's usual channels of distribution to the distribution centres. Such innovations will have to be attempted in our view on a wider scale in various places. (3.28)

8.18. In view of the difficulties of field level functionaries in maintaining accounts continuous efforts are needed in rationalising and simplifying feeding accounts. The attempt

should be to evolve simple and easily understandable set of proformae. For this purpose assistance of experts of accounting procedures may be obtained. (3.30)

8.19. The two schemes of Social Welfare Department supplemented by outright grants have been availed of with greater enthusiasm by State Governments than other programmes such as the Composite Nutrition Programme for Women and children and the mid-day meals programme for school children. The administration and transport costs for running these programmes are fully borne by State Governments. If special Nutrition Programme is extended to cover rural areas, there is a possibility of State Governments availing of the advantageous terms of central assistance of this programme and consequently shifting the beneficiaries from the pre-school component of mid-day meals to this programme. We would, therefore, recommend that Special Nutrition Programme should confine itself in future to the age group 0—5 years only if in any locality the mid-day meals programme caters to the age group of 5-6 years. (3.31)

8.20. Wherever any programme calls for a benchmark survey, the funds for the purpose should be provided in the initial sanction of the scheme itself and technically competent persons should be requisitioned to undertake baseline studies of anthropometric measurements and other important data as baseline. (3.32)

Progress Reporting on Nutrition Feeding Programmes

8.21. The question, whether or not, it is necessary to collect progress reports on a monthly basis or more frequently was considered by us. It may not be necessary to collect information on a daily or a monthly basis. It is adequate if reports on nutrition feeding schemes are furnished to Government of India either quarterly or half yearly. (4.7)

8.22. Various supplemental feeding programmes are being implemented by Departments of Education and Social Welfare at the Centre. We may have to move gradually to set up certain uniform standards and patterns for progress reporting on all feeding schemes. It would be meaningful to adopt the number of 'child days' or 'woman days' on which feeding was carried out as the unit for progress reporting. The concept of child days has been evolved by a simple process of multiplication of the number of beneficiaries by the number of days they were fed. (4.8)

8.23. The proforma should be simple and should contain columns showing number of beneficiaries, feeding days, quantity of food supplied, type of food served and cost of food supplied per child per day. The existing proforma used for collecting progress reports on the Special Nutrition Programme in tribal and slum areas given Annexure III may be considered for adoption. (4.8)

8.24. It is necessary to set up a small centre for collection of data relating to various nutrition feeding schemes, preferably at the block level. Each feeding centre, would furnish information to the block preferably once a month to such a centre. Each block may be provided with one assistant, to coordinate this information and forward to state headquarters. Such a centre may function as part of the administrative machinery of the community development block level. The scheme could be financed by the Government of India during its operation in the first five years. (4.9)

8.25. The progress reports received from the block will have to be examined at state level and discrepancies rectified before sending them to Government of India. A qualitative appraisal of the progress of each schemes should also accompany the consolidated statements from the state after they have been examined by the state level Nutrition Coordination Committee. One of the functions that we envisage for the State Committee is to evaluate the progress reports on nutrition programmes from time to time. (4.10)

8.26. At present, delays in submission of progress reports ranges from three to twelve months. It is necessary that progress reports should be furnished in time not only for a periodical appraisal of the schemes, but also for modifications if necessary in their implementation. (4.11)

Research and Development

8.27. Nutrition education is a weak link in the pre-school feeding programmes. To ensure healthy growth of the child, research in and development of nutrition feeding should be taken up on an extensive scale. Such research effort should encompass not only nutritional variables but socio-economic and socio-psychological variable relating to eating habits.

8.28. An area of research which requires priority is the communication of right ideas on hygiene, environmental sani-

tation and malnutrition to the mother and the child. We suggest that operating departments should set apart funds for research programmes relating to their fields in their annual budgets. (5.2)

8.29. The Agricultural production plan should be oriented towards ensuring supply of adequate and sufficiently nutritive food for the child. In any such effort, both local research and local finance will play an important role. The effort should be to meet all costs of feeding programmes not so much in the shape of cash as of commodities locally grown and contributed for use in the programme. (5.3)

8.30. Research has to be organised in small units such as a district or a group of districts. Two essential requirements of such research would be compactness and homogeneity of agro-climatic conditions. Institutions best suited to organise such areawise research are agricultural universities and national institutes of research like the National Institute of Nutrition, Central Food Technological Research Institute and Indian Agricultural Research Institute. Such research should lead to self-reliance in nutritional programmes. (5.4)

8.31. Considerable experimentation and research needs to be done in existing pre-cooked or other suitably processed and nutritious foods which would be easy to transport and find ready acceptance with the child. (5.5)

8.32. Existing feeding programmes for pre-school children, tend to serve more as a 'substitute' than as a 'supplement' to regular meals. The implications of such a development domestic, social and financial would have to be studied and solution found. (5.6)

8.33. Patterns of consumption for specific age groups, communities, regions are not readily available. Data are limited on well balanced diets using locally available low cost foods. Department of Food in Union Ministry of Agriculture will shortly commence a research programme for linear programming of low cost nutritious foods. There is considerable scope for such research effort in future. (5.7)

8.34. The operational difficulties of "take home" feeding have to be studied and it has to be assessed whether cost of such feeding would bear comparison with conventional centre-based feeding programmes. (5.8)

8.35. There are programmes for expansion of production of MILTONE in the Fourth Plan of Union Department of Food. We would welcome such expansion so that the slender fresh milk resources of the country are extended in order to feed the pre-school child in various parts of the country. (5.10.)

8.36. It is necessary that locations of centres for feeding programmes of several departments and agencies of Government are not too widely dispersed. Feeding programmes in rural areas to the extent, it is feasible, should be located close to each other so that the results of efforts made in the local production of nutritious foods could be shared by all concerned. Similarly, State farms in such cluster areas could play a significant role in production and propagation of soyabean and other protein rich crops. A link has therefore to be forged between state farms and local efforts directed towards feeding programmes. (5.11)

Transport for and Administration of Feeding Programme

8.37. Inadequate storage facilities have led to deterioration of foodstuffs used. We suggest, therefore, a phased programme for building godowns all over the country as part of the integrated programmes of nutrition in the five year plans (6.4)

8.38. It is necessary that problems of storage and delivery of food materials for feeding programmes in tribal areas are socially gone into and efforts made to solve them expeditiously (6.8)

8.39. It was noticed that owing to inadequate storage facilities, class rooms were being used for storage, thereby affecting normal work. Funds now being made available under crash scheme for rural employment could be utilised for building storage in schools (6.9)

8.40. The programme of administration of feeding materials should be handled by the bulk user department in each State. We would like to emphasise that the transport and distribution should remain the responsibility of a single Department in each State (6.11)

Coordination and Evaluation

8.41. The success of the programmes of supplemental feeding will depend on the effectiveness of machinery in State, not only for implementation of individual programmes but for their integration and coordination. For this purpose, the Planning

Commission has recommended constitution of a Coordination Committee in each State. We suggest that the States which have not set up Coordination Committees should constitute such Committees early. It will be necessary for these Committees to meet at least once a quarter. Similar Committees may be set up at district level. (7.3)

8.42. We envisage the following functions for State Level Coordination Committees for Nutrition:—

- (i) to work out as far as possible uniform pattern of procurement, storage and distribution of foodstuffs;
- (ii) to avoid overlapping in setting up feeding centres and in coverage of beneficiaries;
- (iii) to lay down guidelines for effective supervision and implementation of feeding programme by coordinating the functions and responsibilities of field staff presently appointed under different agencies;
- (iv) to work out in-service training programme from time to time for field staff as well as for voluntary organisations involved in implementation of feeding programmes;
- (v) to organise conferences and seminars from time to time on pre-school children feeding programmes;
- (vi) to prescribe pro forma and obtain quarterly reports, regarding progress and to evaluate them from time to time; and
- (vii) to examine evaluation reports on feeding programmes and take quick decisions on them. (7.4)

8.43. It is estimated that in the Fourth Five Year Plan, the outlay on supplementary feeding programmes would be of the order of Rs. 300 crores, including the cost of food material used and expenses on administration and transport. It is, therefore, necessary that planning and implementing agencies and departments at the Centre and States should know from time to time the impact of such feeding programmes on beneficiaries as well as on the community. (7.6)

8.44. Evaluation can be broadly classified into two types:

- (a) internal evaluation and (b) independent evaluation. Internal evaluation, however, cannot replace objective assessment.

ment and evaluation by an independent agency. We, recommend that an evaluation unit should be set up at the Centre for continuous evaluation of supplemental feeding programmes. Representatives of departments implementing these schemes as well as experts in the field will have to be associated with such a Centre not only to direct evaluation studies from time to time but also to review the reports and recommend action on them. It will also be necessary to formulate appropriate yardsticks for evaluation which are reliable and valid and at the same time simple and easily applicable to field conditions. (7.11)

8.45. Apart from the agency for evaluation that we have recommended, universities and research institutions should be persuaded to undertake *ad hoc* studies on different aspects of feeding programmes. (7.12)

	T.R. JAYARAMAN	Chairman
N.A. Agha		O.K. Moorthy
G.C.N. Chahal		(Miss) R. Karnad
	K.V. Natarajan	

PART II
ANNEXURES

CHAPTER I

ANNEXURE I

No. 20-4(1)/70-Agri.
Government of India
Planning Commission

Yojana Bhavan
Parliament Street, New Delhi-1.
Dated the 5th December, 1970

OFFICE MEMORANDUM

Subject : *Committee on Pre-School Feeding Programmes*

The Planning Commission has decided to constitute a Committee on Pre-School Feeding Programmes with the following as Chairman/Members of the Committee :—

- | | |
|---|-----------------|
| 1. Shri T.R. Jayaraman, Joint Secretary, Ministry of Education. | Chairman |
| 2. Dr. N.A. Agha, Joint Secretary, Department of Community Development, Ministry of F.A.C.D. & Cooperation. | Member |
| 3. Shri R. Balasubramanian, Joint Secretary, Department of Food, Ministry of F.A.C.D. & Cooperation. | Member |
| 4. Shri O.K. Moorthy, Director, Department of Social Welfare. | Member |
| 5. Dr. K. Bagchi, Adviser (Nutrition), Directorate General of Health Services. | Member |
| 6. Shri K.V. Natarajan, Deputy Secretary (Food), Planning Commission. | Member-convenor |
2. The following will be the terms of reference of the Committee :—
- (a) A close examination of the pre-school feeding programme undertaken as a part of the mid-day meals programme in order to dovetail them suitably with the pre-school feeding programmes of the Social Welfare Department.
 - (b) Suggesting ways and means of combining the two programmes of the Department of Social Welfare to cover the age group 0-6 years; and
 - (c) Suggesting appropriate coordination between the pre-school feeding programmes of the Department of Social Welfare and that of the Department of Education.¹

Sd/-

(K.V. Natarajan)
Deputy Secretary (Food)

¹The terms of reference were subsequently expanded to include collection of information on the ways and means of improving progress reporting relating to supplemental feeding programmes.

To

All members of the Committee.

1. Shri T.R. Jayaraman Chairman
Joint Secretary,
Ministry of Education.
2. Dr. N.A. Agha,
Joint Secretary,
Department of Community Development,
Ministry of F.A.C.D. & Cooperation.
3. Shri R. Balasubramanian,
Joint Secretary,
Department of Food,
Ministry of F.A.C.D. & Cooperation.
4. Dr. K. Bagchi,
Adviser (Nutrition),
Directorate General of Health Services.
5. Shri O.K. Moorthy,
Director,
Department of Social Welfare.
6. Shri K.V. Natarajan,
Deputy Secretary (Food),
Planning Commission.

Copy to :—

Planning Commission

Deputy Chairman/All Members/Secretary/Adviser (PA)/JS(GA)/(FC)/(SP)
(Agri.)/Senior Specialist (Education)/Chief (Agri.)/(PC)/(SP).

Secretary,

Ministry of Health & Family Planning,
New Delhi.

Secretary,

Department of Food,
Ministry of F.A.C.D. & Cooperation,
Krishi Bhavan, New Delhi.

Secretary,
Department of Agriculture,
Ministry of F.A.C.D. & Cooperation,
Krishi Bhavan,
New Delhi.

Secretary,
Ministry of Education (3 copies)

Additional Secretary,
Department of Social Welfare (3 copies)

Joint Secretary,
Department of Community Development,
Ministry of F.A.C.D. & Cooperation (3 copies)

Secretaries in charge of Health/Education/Social Welfare of all State Govern-
ments and Union Territories.

Chairman,
Central Social Welfare Board,
New Delhi.

ANNEXURE II

IMMEDIATE

No. F. 11-27/70-Schools-3

Government of India

MINISTRY OF EDUCATION & YOUTH SERVICES

New Delhi, dated 2nd February, 1971.

To

**All the State Governments concerned with
Mid-day Meals Programme.**

Subject : *Pre-school Feeding Programme.*

Sir,

I am directed to say that the Planning Commission has constituted a Committee on Pre-school Feeding Programme to (a) examine the pre-school feeding programme undertaken as a part of Mid-day Meals programme in order to dovetail them with the pre-school feeding programme of the Social Welfare Department; (b) suggest ways and means of combining the two programmes of the Department of Social Welfare to cover the entire age group of 0-6 years; and (c) suggest appropriate coordination between the pre-school feeding programme of the Department of Social Welfare and the Department of Education.

The Committee at its first meeting on 2nd January, 1971 decided, *inter-alia* that to ascertain more details of the on-going programmes, a conference of officers concerned with the Mid-day Meals in the Directorates of Education and other Department in the States be convened by the Ministry of Education and Youth Services. It is, therefore, proposed to convene a conference of State representatives in the 3rd week of March, 1971 in New Delhi. The date and venue of the meeting will be intimated to you shortly when the agenda for the conference and other papers will also be supplied.

The Committee also decided to issue a questionnaire to the State Governments with a view to obtaining such information on the various meals programme being implemented by them as may be relevant to its work. A copy of the questionnaire is enclosed in duplicate and it is requested that the same may please be completed and returned to this Ministry at an early date.

Yours faithfully,

Sd/-

(A.N. DHAWAN)

Assistant Educational Adviser

Copy to :—

- (i) All members of the Committee on pre-school feeding programme.
- (ii) Planning Commission.

Part 'D' of the questionnaire has been modified in the light of the suggestions made by Shri T.R. Parameshwaran, Under Secretary, Department of Food.

Sd/-

(A.N. DHAWAN)

Assistant Educational Adviser.

MID-DAY MEALS PROGRAMME IN STATES (UNDER INDO-CARE AGREEMENT)

A. Financial Provision

1. Financial Provision made for the Fourth Plan (Revised)
2. Annual budget under Fourth Plan :
 - (i) for 1969-70 (Actual expenditure)
 - (ii) for 1970-71 (Revised Estimates)
 - (iii) for 1971-72 (Proposed)
3. Budget Provision under 'Non-Plan'
 - (i) for 1969-70 (Actual)
 - (ii) for 1970-71 (Revised Estimates)
 - (iii) for 1971-72 (Proposed)

B. Beneficiaries

4. Number of children fed :
 - (a) Targetted figures for the Fourth Plan :
 - (i) Pre-School children
 - (ii) School-going children
 - (b) Actual Number fed during 1969-70 :
 - (i) Pre-School children
 - (ii) School-going children.
 - (c) Targetted number to be fed during 1970-71 :
 - (i) Pre-School children
 - (ii) School-going children.

C. Administrative Arrangements

5. Whether there is any other programme for feeding school children outside the Indo-CARE Agreement; if so, the details of that programme may please be indicated. Information about budgetary provisions made, and the number of school children fed under any other programme may be given.

6. The manner in which figures relating to the number of children being fed, both pre-school and school-going are collected and maintained by the State Government. A specimen copy of the pro forma to collect this information may please be sent.
7. The name of the Department in the State which is handling the meals programme under the Indo-CARE Agreement.
8. Whether there is an officer designated to look after this programme, in the State; if so, his designation.
9. Whether there is an officer in each district in-charge of this programme; if so, the number of such officers and their designation.
10. Whether there is a Central kitchen where food is cooked for a number of feeding Centres; if so, the details thereof.
11. The total number of feeding centres in the State.
12. Facilities for storing food stuff; the number of godowns, etc. in the States.
13. The transport arrangements for the operation of the Scheme.

D. Food

- (a) Items of un-cooked food (raw materials) used for the programme.
- (b) Préparations made from the food-stuffs; please indicate whether Uppuma, Halwa, etc.
- (c) Quantity per child per day.
- (d) Number of feeding days in the year.
- (e) Time of feeding the children :
Pre-School going and School-going.
- (f) Whether food materials supplied by CARE only are used; or whether it is supplemented by any indigenous food-stuffs; if so, the detailed thereof.

E. Others

- (i) Name of the Agency/Agencies through which feeding programmes for pre-school children and school children are being carried out in the State;
- (ii) Cost of feeding material per child per day
 - (a) for-pre-school feeding programme;
 - (b) for mid-day meals programme;
- (iii) Administrative and transportation cost for the feeding programmes per child per day
 - (a) for pre-school feeding programme;
 - (b) for mid-day meals programme.

ANNEXURE III

List of points on which clarification may be sought from the State Governments regarding the work of the Committee on Pre-School Feeding Programmes

1. *The first item of the term of reference is to undertake a close examination of the pre-school feeding programmes taken up as a part of the mid-day meals programme in order to dovetail them suitably with the pre-school feeding programmes of the Social Welfare Department*
 1. The number of pre-school children fed in mid-day meals programme, districtwise.
 2. Average number of days in year for which the feeding is undertaken.
 3. Composition of foodstuffs utilised in the feeding programme.
 4. Fourth Plan and anticipated Annual Plan provisions for pre-school feeding component of the mid-day meals programme.
 5. Details of organisational machinery involved in the feeding programme.
 6. Number of centres where pre-school feeding is being undertaken both under mid-day meals programme and through either of the two Central Sector Schemes of the Social Welfare Department.
 7. The utility of the pre-school feeding programmes taken up as a part of the mid-day meals programme. The reasons for not undertaking these two feeding programmes separately.
 8. Number of pre-school children fed as part of the pre-school feeding programme of the Social Welfare Department.
 9. Average number of days in a year for which feeding is undertaken.
 10. The composition of foodstuffs utilised in the feeding programmes.
 11. Fourth Plan and anticipated Annual Plan provisions for pre-school feeding component of the programmes of the Social Welfare Department.
 12. Details of the organisational machinery involved in the feeding programmes.
 13. Scope for combining the two programmes of pre-school feeding taken up as part of the mid-day meals programme and the pre-school feeding programme of the Social Welfare Department.
 14. Production and availability of foodstuffs utilised in the feeding programmes for pre-school children in both Departments.

2. *Suggesting ways and means of combining the two programmes of the department of Social Welfare to cover the age-group 0-6 years*
 1. Institutional arrangements existing at present for the feeding programmes of the Social Welfare Department.
 2. Number of Balwadis set up for nutrition feeding of pre-school children through Balwadis.
 3. Utility of these Balwadis.
3. *Suggesting appropriate coordination between the pre-school feeding programme of the Social Welfare Department and that of the Ministry of Education at State and District levels*
4. *Existing Progress Reporting arrangements in respect of the following nutrition programmes at the village level to the State level and to the Centre*
 1. Applied Nutrition Programme.
 2. Composite nutrition programme for women and pre-school children.
 3. Mid-day Meals Programme.
 4. The two feeding programmes of the Social Welfare Department.
 5. Nutrition schemes undertaken by the Health and Family Planning Departments of the State.
5. *Transport and Administration of the Programmes*
 1. Existing arrangements of administration of the programmes at the village level, district level and State level.
 2. Role of voluntary agencies in the administration of programme.
 3. Possibility of having a unified administration for the various pre-school feeding programmes undertaken by the States.
 4. Existing transport arrangements for the implementation of programmes.
 5. Cost of transport arrangements for the programmes.
 6. Improvement suggested in transport arrangements at the village level, district level and State level.
6. *Review of the work of State Coordination Committee for Nutrition*

ANNEXURE IV

Dates of visit to State Governments and State Feeding Centres by the members of the Committee

<i>Dates.</i>	<i>States</i>
24-26 June, 1971	Gujarat
26-29 July, 1971	Tamil Nadu
18-19 August, 1971	Mysore
19-21 August, 1971	Kerala
6-7 September, 1971	West Bengal
8-9 September, 1971	Orissa
25-26 November, 1971	Haryana & Punjab

CHAPTER II

ANNEXURE I

*Coverage of Mid-day Meals Programme in Schools during the years
1969-70, 1970-71 and 1971-72*

(Figures in Lakhs)

S. No.	Name of the State	No. of beneficiaries during		
		1969-70	1970-71	1971-72
1	2	3	4	5
1. Andhra Pradesh		7.36	8.16	8.46
2. Bihar		4.00	4.00	—
3. Gujarat		2.11	2.59	3.65
4. Haryana		1.83	3.37	3.37
Kerala		20.09	20.84	21.00
6. Madhya Pradesh		4.90	5.60	6.41
7. Maharashtra		1.50	3.60	4.72
8. Mysore		17.21	12.00	12.00
9. Orissa		7.16	8.16	8.16
10. Punjab		3.75	3.75	3.75
11. Rajasthan		2.00	3.00	5.97
12. Tamil Nadu		18.67	18.67	18.67
13. Uttar Pradesh		6.50	6.50	11.50
14. West Bengal		8.39	11.00	11.02
Union Territories				
15. Delhi Administration		0.23	0.21	0.22
16. Pondicherry		0.40	0.44	0.47
TOTAL		106.21 ¹	112.06 ¹	119.48 ¹

¹This includes figures for Dadra and Nagarhaveli; and Goa, Daman and Diu.

ANNEXURE II

Type and Form of Food Served in the States

State	Name of Department	Name of Feeding Programme.	Food Served	Composition	Quantity (Ration)	Average No. of Feeding Days (In a year)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	Education	School	Bottled Milk Uppuma	Milk Powder CSM/Balahar Salad Oil	1 oz. 3 oz. ½ oz.	215 215
Gujarat	Panchayat & Health	School	Bottled Milk Uppuma/ Porridge	Milk Powder Bulgur Salad Oil	1 oz. 3 oz. 1 oz.	200 200
Haryana	Education Development	School	Halwa/ Porridge Halwa/ Porridge	C.S.M. Salad Oil C.S.M. Salad Oil	2 oz. 1 oz. 2 oz. ½ oz.	200 250
Kerala	Education	School	Uppittu	CSM/Balahar Bulgur Salad Oil	1½ oz. 2 oz. ½ oz.	190
Maharashtra	Education & Social Welfare Bombay Municipal Corporation	School	Uppuma Bottled Milk Biscuit/Bun	CSM Salad Oil Milk Powder Wheat Flour	2 oz. ½ oz. 1 oz. 0.39 oz.	150 195

Madhya Pradesh	Tribal Welfare	School	Halwa/ Porridge	CSM Bulgur Salad Oil	2 oz. 2 oz. ½ oz.	220
Mysore	Education	School	Uppittu	CSM/ Balahar Salad Oil	3 oz. ½ oz.	180
			Bottled Milk Uppittu	Milk Powder CSM/ Balahar Salad Oil	1 oz. 3 oz. ½ oz.	180 135
Orissa	Panchayat Raj & Community Development	School	Porridge/ Uppuma	CSM Bulgur Salad Oil	2 oz. 1 oz. ½ oz.	220
Punjab	Education	School	Halwa Salad	CSM Salad	2 oz. ½ oz.	133
	Education (Chandigarh City Programme)	School	Bottled Milk	Milk Powder	1 oz.	200
	Amritsar Municipal Committee	School	Bottled Milk	Milk Powder	1 oz.	200
Rajasthan	Panchayat & Development	School	Halwa	CSM Salad Oil	3 oz. 1 oz.	200
Tamil Nadu	Education	School	Uppma/ Kanji	Bulgur CSM Salad Oil	3.53 oz. (100 gms) 1.06 oz. (30 gms) 0.282 oz. (8 gms)	200

75

ANNEXURE II (Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Pondicherry	School	Uppuma/ Kanji	Bulgur	3.53 oz. 100 gms.	
				CSM	1.06 oz. (30 gms.)	200
				Salad Oil	0.282 oz. (8 gms.)	
Uttar Pradesh .	Education	School	Halwa/ Porridge	CSM	3 oz.	
				Salad Oil	1 oz.	220
West Bengal .	Education	School	Boottled Milk	Milk	1 oz.	175
			Milk	Powder		
			Bread	Flour, Milk & Salad Oil	1.3 oz.	
	Relief & Social Welfare	School	Porridge	CSM	1½ oz.	160
				Bulgur	2 oz.	

CHAPTER IV

ANNEXURE I

MID-DAY MEALS PROGRAMME UNDER THE INDO-CARE AGREEMENT

Information to be supplied by the State Governments.

1. The date and/or year from which the Mid-Day Meals Programme for feeding school children was introduced.
2. (a) Budget provision for the financial year for this programme. Figures for "Plan" and "Non-Plan" may be given separately.
(b) Targetted number of beneficiaries : Pre-School :
School :
3. Items on which the State Government is incurring expenditure such as transport, administration, etc.
4. Expenditure incurred during the year under "Plan " and "Non-Plan".
5. (a) Budget provided for the year under "Plan" and "Non-Plan".
(b) Targetted number of beneficiaries : Pre-School :
School :
6. The Number of feeding days during the year.
7. The number of meals served during the year : Pre-School : (Separate figures for pre-school and school going children may be given) School :
8. Number of meals served in each quarter during the year, indicating pre-school and school children separately, as follows : *Pre-School*
(a) Quarter ending 30th June :
(b) Quarter ending 30th September :
(c) Quarter ending 30th November :
(d) Quarter ending 30th March :
9. The number of feeding days in each quarter during the year is as follows
(a) Quarter ending 30th June :
(b) Quarter ending 30th September :
(c) Quarter ending 30th November :
(d) Quarter ending 31st March :
10. The items of food commodities served to each child. Please indicate the names such as CSM, Balahar, milk powder, biscuits, milk, oil, etc. and the quantity of each item.

- | | | |
|--|---------------------------|-------------------------------|
| 11. Name of District ¹ , covered under Mid-day meals Programme and those not covered. | Revenue Districts covered | Revenue Districts not covered |
| 12. Contributions of local committees/organisations cash or in kind, if any | Value in Rs. | |
| 13. General remarks, if any. | | |

If any revenue districts are partially covered please indicate Talukas or blocks covered and those yet to be covered.

CHAPTER IV

ANNEXURE II

FORM-I

Monthly Progress Report of Balwadis

For the Month of _____ 197 .

(To be filled in by Balsevika Incharge of the Balwadi or Day Care Centre functioning in the field under Nutrition Programme).

1. GENERAL

S. No .	Item	Particulars
(1)	(2)	(3)
1.	Name of Organisation	
2.	Address of Balwadi	
3.	Date of establishment of Balwadi	
4.	Date of functioning under the Nutrition Programme	

2. ATTENDANCE OF CHILDREN IN BALWADI

S. No.	Item	Particulars
1	2	3
1.	(i) No. of Children on roll at Balwadi in the beginning of Month.	
	(ii) No. of children admitted during the Month	
	(iii) No. of children discontinued during the Month	
	(iv) No. of children on roll at the end of Month	
2.	(i) Working days during the Month	
	(ii) Average attendance during the Month	

3. IRREGULARITY OR DISCONTINUATION IN ATTENDANCE

S. No.	Reasons of absence or Discontinuation	No. of children
(1)	(2)	(3)
1.	Long Sickness	
2.	Indifference of parents	
3.	Gone Temporarily to other places	
4.	Migration to other places	
5.	Any other Reason	
6.	Any other Reason	
7.	Total	

4. PERSONNEL

S. No.	Designation of post.	No. in position during the month	No. in position according to qualification		No. of position according to training	
			Matric and above	Below Matric	Trained in Balwadi work ¹	Orientalion
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Balsevikas					
2.	Helpers					

¹Under Column 6 please mention only those who had undergone about a years' training in balwadi work.

²Under Column 7 please mention only those who had undergone Orientation or short term training in balwadi work.

5. SERVICES OFFERED AT BALWADI
5.1. NUTRITIONAL SERVICES

S. No.	Menus of food supplied	No. of days during which food was given	No. of children days (Children x days)
(1)	(2)	(3)	(4)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

5.2. HEALTH RECORD
5.2.1. IMMUNISATION

S.No.	Kind of Vaccinations given during the month	No. of Children Vaccinated
(1)	(2)	(3)
1.	Small Pox	
2.	Cholera and Typhoid	
3.	B.C.G.	
4.	Triple Vaccine	
5.	Anti-Polio Vaccine	
6.	Any other (Please Specify)	
7.	Any other (Please Specify)	

Please calculate by adding the number of diets given to the children every day.

5.2.2. HEALTH CHECK-UP

S. No.	Item	Particulars
(1)	(2)	(3)
1.	Whether children have been examined by Medical Officer during the year or not?	Yes/No
2.	If so, the number of children examined.	
3.	The no. of Children yet to be examined.	

QUARTERLY HEALTH RECORD

5.2.3. (HEIGHTS AND WEIGHTS-BOYS)

(To be sent alongwith the Reports for the Months of March, June, September and December every year).

S. No.	Age Group	Total No. of boys	Heights			Weights		
			No. examined	Total height of all boys (Meters)	Average height (Meters)	No. of boys examined	Total weight of all boys K. gms.	Average Weights.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Below 3 years							
2.	3-4 years							
3.	4-5 years							
4.	5-6 years							
5.	Total							

QUARTERLY HEALTH RECORD

5.2.4. HEIGHTS AND WEIGHTS—GIRLS

(To be sent alongwith the Reports for the Months of March, June, September and December every year).

S. No.	Age Group	Total No. of Girls	Heights			Weights		
			No. of children examined	Total heights of all girls (Meters)	Average heights (Meters)	No. of children examined	Total weight of all girls (K. Gms.)	Average Weight (K. Gms.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Below 3 years							
2.	3-4 years							
3.	4-5 years							
4.	5-6 years							
5.	Total							

6. ACTIVITIES IN BALWADIS

S.No.	Name of Activities	Whether provided or not
(1)	(2)	(3)
1.	Games	Yes/No
2.	Clay modelling	Yes/No
3.	Cleanliness of dress	Yes/No
4.	Cleanliness of body	Yes/No
5.	Cleanliness of Balwadi	Yes/No
6.	Counting upto 100	Yes/No
7.	General knowledge about environment	Yes/No
8.	Excursions	Yes/No
9.	Visits to fairs & festivals	Yes/No
10.	Meeting with Parents	Yes/No

7. CO-OPERATION FROM PARENTS AND THE LOCAL COMMUNITY

S. No.	Item	Particulars
(1)	(2)	(3)
1.	No. of Home visits made by Balsevika during the Quarter	
2.	No. of Mothers giving voluntary help to Balwadis as per nature of help given	
	(a) Particulars in the work of Balwadis	
	(b) Help in cleanliness	
	(c) Help in out-door visits of children	
	(d) Help in taking children to doctor/dispensary/P.H. centre	
3.	Amount of monthly fees per child charged if any	
4.	Value of contribution from parents in kind	
5.	Value of contributions from the community in kind	

8. SUPERVISION VISITS

S. No.	Supervisor	No. of visits
(1)	(2)	(3)
1.	By local agency representatives	
2.	By state and National level organisations representatives	
3.	Any other (Please Specify)	
4.	Average No. of supervision visits for Balwadi during the month	

9. RECEIPTS AND EXPENDITURE**9.1. RECEIPTS**

S. No.	Item	Amount Received	
		During the month	Upto the Month during the year
(1)	(2)	(3)	(4)
1.	Grants		
2.	Community contribution		
3.	Fees from parents		
	Total		

9.2. EXPENDITURE

S. No.	Item	Amount Spent	
		During the month	Upto the month during the year
(1)	(2)	(3)	(4)
1.	Supplementary Food		
2.	Salaries		
3.	Honorarium to worker		
4.	Equipment		
5.	Any other (Please Specify)		
6.	Any other (Please Specify)		
7.	Any other (Please Specify)		
	Total		

Place :

Signature _____

Date :

Name _____

Designation. _____

DEPARTMENT OF SOCIAL WELFARE

Scheme : Programme of Nutrition for Pre-school Children
through Balwadis and Day Care Centres

PROGRESS REPORT ON CHILD WELFARE SERVICES OFFERED
AT BALWADIS

FORM II

Quarterly Progress Report for

(Quarter ending—————)

(To be filled in by the State branches or Affiliates of the National Level Organisations entrusted with the implementation of the programme compiling from the information received from the balwadis and Day Care Centres functioning in the field under Nutrition Programme)

1. GENERAL

S. No.	Item	Particulars
(1)	(2)	(3)
1.	NAME OF STATE BRANCH OF THE ORGANISATION Or Affiliated Organisation.	
2.	Address of the State Branch or Affiliated Organisation	
3.	Total Number of Balwadis covered under the programme by the end of quarter	
4.	Total Number of Children on roll at balwadis at the end of quarter	

2. NUMBER OF BALWADIS AND CHILDREN ON ROLL

S. No.	Item	Particulars
(1)	(2)	(3)
1.	No. of Balwadis in the beginning of quarter	
2.	No. of Balwadis at the end of quarter	
3.	No. of Children on roll at Balwadis in the beginning of quarter	
4.	No. of Children admitted in Balwadis during the quarter	
5.	No. of Children discontinued during the quarter	

3. PERSONNEL

S. No.	Designation of Post	No. in position at the end of quarter	No. in position according to qualifications		No. of position according to training received	
			Matric & above Matric	below Matric	Trained in Balwadi work ¹	Orientalion ²
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Balsevikas					
2.	Helpers	x	x	x	x	x

4. HEALTH SERVICES OFFERED AT BALWADIS

S.No.	Items	Particulars
(1)	(2)	(3)
1.	Total No. of Balwadis Providing Nutritional Services to Childien	
2.	Total No. of Child Days during the quarter when the food under nutrition programme had been supplied to the Children	
3.	Total No. of Balwadis where children had been vaccinated during the month	
4.	Total number of Children vaccinated during the quarter as for kind of vaccination given	
	(a) Small pox	(a)
	(b) Cholera	(b)
	(c) B.C.G. Vaccination	(c)
	(d) Triple Vaccine	(d)
	(e) Anti polio Vaccine	(e)
	(f) Any other (Please specify)	(f)
5.	No. of Balwadis where the children were examined by the doctor during the quarter	

¹Under column 6 please mention those who had training in Balwadis work for about a year.

²Under column 7 please mention those who had undergone Orientation or short term course.

(1)	(2)	(3)
6.	No. of Children examined by the doctor during the quarter	
7.	No. of Balwadis where heights of the children had been examined during the quarter	
8.	Total No. of children whose heights had been examined	
9.	Total No. of Balwadis where weights of the children had been examined during the quarter	
10.	Total No. of children whose weights had been examined	

5. ACTIVITIES IN BALWADIS

S. No.	Item	Particulars
(1)	(2)	(3)
1.	No. of Balwadis Providing Games to the Children	
2.	No. of Balwadis Providing clay modelling activities to the children	
3.	No. of Balwadis impressing cleanliness habits among children	
4.	No. of Balwadis where counting upto 100 is taught to the children	
5.	No. of Balwadis where general knowledge about environments is taught to the Children	
6.	No. of Balwadis where excursions have been arranged during the quarter	
7.	No. of Balwadis where visits to fair and festivals have been arranged during the quarter	
8.	No. of Balwadis where moral instructions to the children is being given	

6. COOPERATION FROM PARENTS AND LOCAL COMMUNITY

S. No.	Items	Particulars
(1)	(2)	(3)
1.	No. of Balwadis where home visits have been made by the balsevika during the quarter	
2.	Total Number of visits made by balsevika during the quarter	
3.	Average number of visits per balwadi	
4.	No. of Balwadis where mothers are giving help	
5.	Total number of mothers giving help	
6.	Total number of mothers giving help to balwadis and nature of help given	
	(a) Participation in the work of balwadis	
	(b) Help in cleanliness	
	(c) Help in Outdoor visits of children	
	(d) Help in taking children to doctor/dispensaries	
	(e) Any other (Please specify)	
7.	No. of Balwadis where monthly fees per child is charged as:	
	(a) below 25 paise.	(a)
	(b) between 25 paise and 50 paise	(b)
	(c) between 50 paise and Rs. one	(c)
	(d) between Re. 1/- and Rs. 3/-	(d)
	(e) above Rs. 3/-	(e)
8.	No. of Balwadis where parents have contributed in kind	
9.	Total value of contributions from parents in kind	
10.	No. of Balwadis where Community has contributed in kind	
11.	Total value of contributions from the community in kind	

7. SUPERVISION VISITS

S. No.	Items	Particulars
(1)	(2)	(3)
1.	No. of Balwadis visited by local Agency Representatives during the Quarter	
2.	Total No. of Visits made by local Agency Representatives during the quarter	
3.	No. of Balwadis visited by State and National Level Organisation Representatives	
4.	Total No. of visits made by State and National Level Organisation Representatives	

8. RECEIPTS AND EXPENDITURE

8.1. RECEIPTS DURING THE QUARTER

S. No.	Source of Help	Amount Received	
		During the quarter	Upto the quarter during the year
(1)	(2)	(3)	(4)
1.	Central Govt.		
2.	State Govts.		
3.	Foreign Organisations		
4.	Local Organisations		
5.	Fees from Parents		
6.	Donations		
7.	Any other		
8.	Total		

8. EXPENDITURE DURING THE QUARTER

S. No.	Item of Expenditure	Amount Spent	
		During the quarter	During the year
(1)	(2)	(3)	(4)
	1. Supplementary food		
	2. Salaries		
	3. Honorarium to workers		
	4. Equipment		
	5. Any other (Please specify)		
	6. Any other (Please specify)		
	7. Any other (Please specify)		
	8. Total		

8. LIST OF NEW BALWADIS

S.No.	Address of new Balwadis covered under the programme	Date of establishment	Name of States & Union Territory in which located	No. of children	No. of Balsevikas
(1)	(2)	(3)	(4)	(5)	(6)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

DEPARTMENT OF SOCIAL WELFARE

Scheme: Programme of Nutrition for Preschool children through
Balwadis and Day Care Centres

PROGRESS REPORT ON CHILD WELFARE SERVICES OFFERED
AT BALWADIS

FORM III

Quarterly Progress Report for Quarter ending_____

(To be filled in by the Organisations at National Level entrusted with the
implementation of the programme compiling from the information
received from their States branches and affiliates)

1. GENERAL

S. No.	Items	Particulars
(1)	(2)	(3)
1.	Name of Organisation	
2.	Address of Organisation	
3.	Number of States covered under the programme	
4.	Number of Union Territories covered under the programme	
5.	Number of affiliated Organisation promoting the programme. (Please supply a list of the branches and affiliates separately along with their addresses)	
6.	Total No. of Balwadis covered under the programme by the end of quarter	
7.	Total No. of children on roll at Balwadis at the end of quarter	

2. STATE-WISE NUMBER OF BALWADIS AND CHILDREN ON ROLL

S. No.	Name of State/ Union Territories	No. of Balwadis					No. of children on roll at the end of the quarter
		No. of Balwadis in the beginning of quarter	No. of Balwadis in the end of quarter	No. of Children in Balwadis at the beginning of quarter	No. of children admitted during the quarter	No. of children discontinued during the quarter	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	A. STATES						
	1. Andhra Pradesh						
	2. Assam						
	3. Bihar						
	4. Himachal Pradesh						
	5. Haryana						
	6. Gujarat						
	7. Jammu and Kashmir						
	8. Kerala						
	9. Madhya Pradesh						
	10. Maharashtra						
	11. Meghalaya						
	12. Mysore						
	13. Nagaland						
	14. Orissa						
	15. Punjab						
	16. Rajasthan						
	17. Tamil Nadu						
	18. Uttar Pradesh						
	19. West Bengal						

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	20. Andaman & Nicobar Islands						
	21. Delhi						
	22. Goa, Daman and Diu						
	23. Chandigarh						
	24. Laccadive, Minicoy & Amindiv Islands						
	25. Manipur						
	26. Pondicherry						
	27. Tripura						
	28. Total						

3. PERSONNEL

S. No.	State/Union Territories	No. of position at the end of quarter		No. of Balsevikas in position according to qualification		No. of Balsevikas in position according to training	
		Balsevikas	Helper	Matric	Below Matric	Trained in Balwadis work	Orientalion
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	A. STATES						
	1. Andhra Pradesh						
	2. Assam						
	3. Bihar						
	4. Himachal Pradesh						
	5. Haryana						
	6. Gujarat						
	7. Jammu and Kashmir						

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
8.	Kerala						
9.	Madhya Pradesh						
10.	Maharashtra						
11.	Meghalaya						
12.	Mysore						
13.	Nagaland						
14.	Orissa						
15.	Punjab						
16.	Rajasthan						
17.	Tamil Nadu						
18.	Uttar Pradesh						
19.	West Bengal						
20.	Andaman and Nicobar Islands						
21.	Delhi						
22.	Goa, Daman, and Diu						
23.	L, M and A Islands						
24.	Manipur						
25.	Pondicherry						
26.	Tripura						
27.	Total						

NOTE:—¹Under Column 7 please mention those who had about one year of Training.

²Under Column 8 please mention those who had undergone Orientation or short-term course.

4. SERVICE OFFERED AT BALWADIS HEALTH CENTRES

S.No.	Items	Particulars
(1)	(2)	(3)
1.	No. of Balwadis providing Nutritional Services to children	
2.	No. of Balwadis where children had been given vaccinations during the quarter	
3.	Total no. of children vaccinated during the quarter as per kind of vaccination given	
	(a) Small-pox	(a)
	(b) Cholera	(b)
	(c) B.C.G. Vaccine	(c)
	(d) Triple Vaccine	(d)
	(e) Anti Polio Vaccine	(e)
	(f) Any other (Please specify)	(f)
4.	No. of Balwadis where the children were examined by the Doctor during the quarter	
5.	No. of children examined by the Doctor during the quarter	
6.	No. of Balwadis where heights of the children have been examined during the quarter	
7.	No. of Balwadis where weights of the children have been examined during the quarter	

5. ACTIVITIES IN BALWADI

S. No.	Items	Particulars
(1)	(2)	(3)
1.	No. of Balwadis providing Games to the children	
2.	No. of Balwadis providing Clay Modelling activities to the children	
3.	No. of Balwadis giving general knowledge about environments to the children	

(1)	(2)	(3)
4.	No. of Balwadis where counting upto 100 is taught to the children	
5.	No. of Balwadis where visits of children to fair and festivals have been arranged during the quarter	
6.	No. of Balwadis where meetings with parents have been arranged during the quarter	
7.	No. of Balwadis where moral institutions to the children is given	

6. COOPERATION FROM PARENTS AND THE LOCAL COMMUNITY

S.No.	Items	Particulars
(1)	(2)	(3)
1.	No. of Balwadis where home visits have been made by the Balsevika during the quarter	
2.	Total No. of home visits made by Balsevika during the quarter	
3.	Average No. of visits per Balwadi	
4.	No. of Balwadis where mothers are giving help	
5.	Total No. of mothers giving help	
6.	Value of the contributions made by the parents in kind	
7.	Value of the contributions made by the community in kind	

7. SUPERVISION VISITS,

S.No.	Items	Particulars
(1)	(2)	(3)
1.	No. of Balwadis visited by Local Agency Representatives during the quarter	
2.	Total number of visits made by Local Agency Representatives during the quarter	
3.	No. of Balwadis visited by State and National Level Organisation's Representatives during the quarter	
4.	Total No. of visits made by State and National Level Organisation Representatives.	

8. RECEIPTS AND EXPENDITURE

8.1 RECEIPTS DURING THE QUARTER

S. No.	Source of Help	Amount Received	
		During the quarter	Upto the quarter during the year
(1)	(2)	(3)	(4)
1.	Central Government		
2.	State Governments		
3.	Foreign Organisations		
4.	Local Organisations		
5.	Fees from Parents		
6.	Donations		
7.	Any other		
8.	Total		

8.2. EXPENDITURE DURING THE QUARTER

S. No.	Item of Expenditure	Amount spent	
		During the quarter	During the Year
(1)	(2)	(3)	(4)
	1. Supplementary Food		
	2. Salaries		
	3. Honorarium to workers		
	4. Equipment		
	5. Any other		
	6. Any other		
	7. Any other		
	8. Total		

9. NEW LIST OF BALWADIS

S. No.	Address of Balwadis	Date of establishment	Name of State or Union territory in which located	No. of children	No. of Balsevikas
(1)	(2)	(2)	(4)	(5)	(6)

Place _____

Signature _____

Date _____

Name _____

Designation _____

ANNEXURE III

SPECIAL NUTRITION PROGRAMME FOR TRIBAL AREAS

State of.....

Progress Report for the month of

S. No.	District	Tribal Deve- lopment Block	No. of feeding centres already opened	No. of feeding centres opened during the month	Total	No. of beneficia- ries			Nursing & expectant mothers	Details of food served quantity per bene- ficiary	R E M A R K S
						0-1 year	1-3 year	3-6 year			
(1)	(2)	(3)	(4)	(5)	(6)	(7)			(8)	(9)	(10)

CHAPTER IV

ANNEXURE III

SPECIAL NUTRITION PROGRAMME FOR URBAN AREAS

State of.....

Progress Report for the month of.....

S. No.	District	City/Town	No. of feeding centres already opened	No. of feeding centres opened during the month	Total	No. of beneficiaries			Nur-sing & expectant mothers	Details of food served quantity per beneficiary	R E M A R K S
						0-1 year	1-3 year	3-6 year			
(1)	(2)	(3)	(4)	(5)	(6)	(7)			(8)	(9)	(10)

ANNEXURE IV

BLOCK QUARTERLY PROGRESS REPORT

for quarter ending.....

Supplementary Schedule: Special Programmes

(i) Applied Nutrition Programme

(To be filled in only by Blocks taken up for Applied Nutrition Programme)

1. GENERAL PARTICULARS

1. State	5. No. of villages
2. District	6. Area (sq. kilometres)
3. Block	7. Population (Total)
4. No. of Gram Panchayats	8. Date of submission of the Report

2. PROGRAMME ACHIEVEMENTS

S. No.	Item	Unit	Target, if any current year ending 31st March	Achievement during current quarter	Commulative total since beginning of current year
(1)	(2)	(3)	(4)	(5)	(6)
1.	Villages taken up under the programme	no.			
2.	Mahila Samitis associated with the programme:				
	(i) number of samitis	no.			
	(ii) membership	no.			
3.	Youth clubs associated with the programme:				
	(i) number of clubs	no.			
	(ii) membership	no.			

(1)	(2)	(3)	(4)	(5)	(6)
4. No. of farms set up :					
(a) Poultry:					
(i) Block units		no.			
(ii) Village units		no.			
(b) Fishery:					
(i) Block units		no.			
(ii) Village units		no.			
(c) Horticulture:					
(i) Block units		no.			
(ii) Village units		no.			
(d) Others (specify):					
(i) Block Units		no.			
(ii) Village units		no.			
5. Fisheries Programme :					
(a) Inland pisciculture:					
(i) water area stocked					
hectares		no.			
(ii) fingerlings supplied		no.			
(b) Coastal fisheries programme:					
(i) Mechanised boats					
introduced		no.			
(ii) Fish landings		kgs.			
(iii) Fish transacted					
through cold storage		kgs.			
6. Garden started :					
(a) Number of Gardens:					
(i) in schools		no.			
(ii) kitchen gardens		no.			
(iii) community gardens		no.			
(b) Area covered by Gardens:					
(i) in schools		hectares			
(ii) kitchen gardens		"			
(iii) community gardens		"			
7. Feeding programme:					
(a) school children/pre-school					
children fed		child days			
(b) expectant and nursing					
mothers fed		women-days			
(c) Quantities supplied:					
(i) fish		Kgs.			
(ii) vegetables		"			
(iii) eggs		'000 no.			
(iv) milk		litres			

(1)	(2)	(3)	(4)	(5)	(6)
8. <i>Non-officials trained in applied nutrition programme:</i>					
(a)	Panchayat Samiti members	no.			
(b)	Panches	no.			
(c)	Members of youth clubs	no.			
(d)	Members of mahila samiti	no.			
(e)	others	no.			
	Total (a) to (e)	no.			
9. <i>No. of persons trained in :</i>					
(a)	Poultry	no.			
(b)	Horticulture	no.			
(c)	Pisciculture	no.			
10. <i>Officials from the Block trained in applied nutrition programme :</i>					
(a)	Public Health Instructors	no.			
(b)	Lady Nutrition Instructors	no.			
(c)	Block level Technical officers	no.			
(d)	Lady Health visitors	no.			
(e)	School Teachers	no.			

No. 18(1)/69-AI (CD)

Government of India

Ministry of Food, Agri., Community Development & Cooperation
(Department of Community Development)

Krishi Bhawan, New Delhi.

July, 28, 1969.

To

The Development Commissioner/
Agricultural Production Commissioners
All States/Union Territories
(except Nagaland, A & N Islands,
Dadra & Nagar Haveli & NEFA)

Subject: Applied Nutrition Programme—Implementation of the recommendations made by the Coordination Committee on ANP.

Sir,

I am directed to enclose herewith extract from the minutes of the meeting of the Coordination Committee on Applied Nutrition Programme held on 14-3-69 and to say that in pursuance of the recommendations made thereunder, it has been decided to call for the following information, in addition to the data already being furnished by the State/U. Territories in the supplementary schedule relating to A.N.P. in the Block level quarterly progress report (Blue Pamphlet).

I. Quarterly basis (Starting from quarter ending Dec. 68)

Item	Target, if any, for the current year ending 31st March	Achievement during current quarter	Cumulative total since beginning of current year
(1)	(2)	(3)	(4)

(A) Feeding Programme

(1) Average number of:

- (a) feeding days for block per month
- (b) average number of persons fed per meal

(1)	(2)	(3)	(4)
(2) Total number fed (no.)			
(a) pre-school children			
(b) school children			
(c) expectant & nursing mothers			
(B) <i>No. of UNICEF vehicles in use for ANP in the State (No.)</i>			
(C) <i>No. of days UNICEF vehicles were in use (No.)</i>			
(D) <i>Total mileage covered by UNICEF vehicles (Dms)</i>			
<i>II. Annual Basis (Information to be supplied with the Report for the quarter ending 31st March)</i>			

Item	1968-69	1969-70
1. <i>Pooling of funds</i>		
(A) No. of ANP Blocks for which funds have been pooled		
(B) Funds earmarked by the State Government under Agricultural Budget for ANP (Rs. '000)		
(i) Poultry		
(ii) Fishery		
(iii) Horticulture		
(iv) Minor Irrigation Works		
(v) Any other programme (specify)		
Total		
2. <i>Production/training Centres</i>		
(i) No. of production/training centres assisted by the UNICEF for ANP (No.)		
(ii) UNICEF Assistance received by (i) above during the year		

	(1)	(2)	(3)	(4)
(iii)	No. of persons trained during the year (No.)			
(iv) (a)	No. of checks and quantity of food supplied by the Poultry Farms			
	(i) No. of chicks (no.)			
	(ii) Quantity of food supplied (kg).			
(b)	(i) Quantity of vegetable seeds distributed by the seed production centres (kg.)			
	(ii) No. of fruit saplings distributed (no.)			
(c)	No. of fish fingerlings distributed by the Regional Farms (no.)			
(v)	Nature and review of the activities which the above centres are engaged			
	(Please furnish narrative information)			

You will appreciate that this information would prove very useful in making an objective study about the working of this important programme. I would, therefore, request you kindly to furnish the above information to this Department regularly along with the Consolidated Quarterly Reports on A.N.P. for the State.

Yours faithfully,
Sd/-

(P.P. Singla)

Deputy Secretary to the Govt. of India.

ANNEXURE V

PROFORMA I

(Consolidated Progress Report for the State)

Quarterly Progress Report under the Composite Programme for women and pre-school children

State..... Report for the quarter ending.....

Item	Target, if any for the current year ending 31st March	Achievements during current quarter	Comulative total since beginning of current year	Comulative total since beginning of the scheme
(1)	(2)	(3)	(4)	(5)

I. Nutrition Education through Mahila Mandals:

- (i) No. of Mahila Mandals participating in the programme
- (ii) Demonstration and kitchen equipment provided to the Mahila Mandals (value Rs.)
- (iii) No. of demonstrations organised
- (iv) No. of rural women trained through the demonstrations

II. Encouragement of economic activities of Mahila Mandals:

- (i) *No. of Mahila Mandals granted awards:*
 - (a) as 'A' grade
 - (b) as 'B' grade
 - (c) as 'C' grade

	(1)	(2)	(3)	(4) ₹	(5)
(ii) <i>Value of awards given to Mahila Mandals in (i) above</i>					
(a) 'A' Grade (Rs.)					
(b) 'B' Grade (Rs.)					
(c) 'C' Grade (Rs.)					
III. Training of Associate Women Workers:					
(a) No. of training camps held					
(b) No. of women workers trained					
IV. Demonstration feeding:					
(i) No. of Balwadis chosen as centres for starting integrated demonstration feeding programme					
(ii) No. of expectant nursing mothers (with children in the age group 0-6 months) provided supplementary feeding					
(iii) No. of pre-school children provided supplementary feeding according to age groups as under:					
(a) 0-6 months					
(b) 6 months to 2 years					
(c) 2-5 years					
(d) Total					
(iv) <i>Cost of supplementary feeding:</i>					
(a) for (ii) above (Rs.)					
(b) for (iii) above (Rs.)					
(c) Total (Rs.)					
(v) Amount of local contribution received for providing supplementary feeding :					
(a) in cash (Rs.)					
(b) in kind (value Rs.)					

	(1)	(2)	(3)	(4)	(5)
(vi) Value of cooking utensils supplied to selected Balwadis (Rs.)					
(vii) Honorarium paid to Associate Women workers at the Mahila Mandals (Rs.)					
(viii) Balwadi workers given institutional training (No.) (3 months training at the Training Institutions)					

V. General

- (i) No. of districts in which the composite programme for Women & Pre-School children has been taken up
- (ii) No. of Blocks in which the Composite Programme has been taken up (irrespective of the no. of components of the programme taken up so far.)
- (iii) No. of Blocks out of (ii) above reporting progress during the quarter
- (iv) No. of Blocks out of (iii) above having Mudhya Sevikas in position during the quarter under report
- (v) No. of District level Directors of Women's programme in position at end of quarter under report
- (vi) No. of District Women Welfare Officers in position at end of quarter under report

(1)	(2)	(3)	(4)
-----	-----	-----	-----

VI. Remarks

Indicate briefly the type of diet distributed at the supplementary feeding programmes, the response and reaction of the people and the extent of their participation. Indicate in particular, the problems faced and the difficulties encountered and the steps taken or proposed to be taken to overcome them

(For Reporting Progress by the Blocks¹ State Hqs.)

Quarterly Progress Report under the Composite Programme for Women and Pre-School Children

State.....Block.....Report for the quarter ending

Whether the Mukhya Sevika has been in position in the Block during the quarter under Report

(answer yes or no.).....

Item	Target, if any for the current year ending 31st March	Achievement during the current year	Comulative total since beginning or by current year	Comulative total since beginning of the scheme
(1)	(2)	(3)	(4)	(5)

I. Nutrition Education through Mahila Mandals

- (i) No. of Mahila Mandals participating in the programme

¹The composite programme for women and pre-school children is taken up in selected Blocks *not* covered by Applied Nutrition and Family and Child Welfare Programmes.

	(1)	(2)	(3)	(4)	(5)
(ii) Demonstration and kitchen equipment provided to the Mahila Mandals (Value Rs.)					
(iii) No. of demonstrations organised					
(iv) No. of rural women trained through demonstrations					
II. Encouragement of economic activities of Mahila Mandals					
(i) No. of Mahila Mandals granted awards :					
(a) as 'A' Grade					
(b) as 'B' Grade					
(c) as 'C' Grade					
(ii) Value of awards given to Mahila Mandals in (i) above.					
(a) A Grade (Rs.)					
(b) 'B' Grade (Rs.)					
(c) 'C' Grade (Rs.)					
III. Training of Associate Women Workers					
(a) No. of training Camps held					
(b) No. of women workers trained					
IV. Demonstration feeding					
(i) No. of Balwadis chosen as centres for starting integrated demonstration feeding programmes					
(ii) No. of expectant and nursing mothers (with children in the age group 0-6 months) provided supplementary feeding					
(iii) No. of pre-school children provided supplementary					

	(1)	(2)	(3)	(4)	(5)
<i>feeding according to age groups as under :</i>					
	(a) 0-6 months				
	(b) 6 months—2 years				
	(c) 2—5 years				
	(d) Total (Rs.)				
(iv) <i>Cost of supplementary feeding :</i>					
	(a) for (ii) above (Rs.)				
	(b) for (iii) above (Rs.)				
	(c) for Total (Rs.)				
(v) <i>Amount of Local Contribution received for providing supplementary feeding</i>					
	(a) in cash (Rs.)				
	(b) in kind (value Rs.)				
(vi) Value of cooking utensils supplied to selected Balwadis (Rs.)					
(vii) Honorarium paid to associate Women workers at the Mahila Mandals (Rs.)					
(viii) Balwadis workers given institutional training (No.) (3 months training at the Training Institutions)					

CHAPTER VI

ANNEXURE I

Transport arrangements made by States from the Port of the feeding Centre/ Godowns

S.No.	State	Transport Arrangements
1.	Andhra Pradesh	The food received at Madras Port transported through rail by the Food Corporation of India to all the Zilla Parishads and the Zilla Parishads in turn take care of the transport from Zilla Parishads to the feeding centres
2.	Bihar	Food commodities transported from the District Headquarters to sub-divisional and block godowns by trucks and from block godowns to feeding centres by bullock-carts and head-loads
3.	Gujarat	Not available
4.	Haryana	Railways and other modes of public conveyance
5.	Kerala	CARE foodstuffs are transported by covered lorries from the Cochin Port to various Warehouses and CARE Central Depot at Cochin. From there month-wise distribution is made to the schools depots of Assistant Educational Officers according to their necessity. The work is got done through contractors selected on tender basis
6.	Madhya Pradesh	Though Tribal Development Corporation and private truck owners
7.	Maharashtra	Not available
8.	Mysore	A private transport agency is engaged in the work of transportation on contractual basis. The food is transported by lorries from Madras Port to Bangalore Godown and from Bangalore to several Talukas of the State

1	2	3
9. Orissa		The transporting agents are being appointed by Collectors for each district every year
10. Punjab		Bombay to main consignees distribution by rail. Main consignee to consignee blocks by rail or road block to school by road
11. Rajasthan		From port to District Headquarters through Rail and afterwards upto feeding centres by truck. The entire cost on transportation upto school door met by State Government
12. Uttar Pradesh		Not available
13. Tamil Nadu		The transport of CARE commodities are made through the lorries of Southern Roadways Private Ltd., i.e. from Madras godowns to District godowns. The range godowns distribute the CARE commodities to the schools under their jurisdiction
14. Pondicherry		CARE articles are transported through lorry service from Madras to the respective offices of the Deputy Inspector of Schools in each Zone
15. West Bengal		By rail, truck and cart

CHAPTER VII

ANNEXURE I

P.K.J. Menon
Adviser (PA)

D.O.No. 20-3(9)/69-Agri

4th June, 1970.

Dear Shri

I am to say that several Departments of the Union and the State Governments are involved in implementing nutrition programmes. There are also a number of voluntary agencies engaged in this work. It has been realised that there is need for systematic communication consultation and coordination among them. At the central level, certain arrangements for coordinating the activities of the Departments of the Union Government, have already been made. In respect of the overall coordination of the programme, not only of the different Departments but for the country as a whole, the Fourth Plan contemplates that the Planning Commission will have to provide the requisite means of coordination including review and evaluation. The Plan also stresses the important role of coordination of nutrition programmes in each State. The success of the programme as a whole will depend on the effectiveness of the machinery in the States not only for implementation of individual programmes, but for their integration, appraisal and evaluation. In your State, nutritional programmes are likely to include not only nutritional feeding of school children and pre-school children, but also nutrition education programmes, e.g. Applied Nutrition Programme and the Composite Nutrition Programme for women and pre-school children. It is also likely that you are at present engaged in evolving a suitable machinery for the special programme for feeding of pre-school children in the tribal areas and slum areas of metropolitan towns as announced by the Prime Minister in the Budget Speech for 1970-71.

At the Central level, we have found that constitution of a Coordination Committee with representatives of all Departments concerned with nutrition programmes, has helped in the furtherance of the programmes in many ways. The holding of frequent meetings of the Coordination Committee has also helped in solving immediate problems besides serving to focus attention on long-range aspects of nutrition work.

We feel that it will prove equally useful if such a Coordination Committee is set up in each State for similar purpose. As condition vary from State to State, it is difficult to make any suggestions as to who should be the Chairman of the Coordination Committee. As many of the schemes relate to Plan programmes, the possibility of making the Development Commissioner/Secretary (Planning) as the coordinating authority may be considered.

We will be interested to know in due course the action taken in this regard.

All Chief Secretaries (By name)

Yours sincerely,
Sd/- P.K.J. Menon.

ANNEXURES II

Copy of the letter from Sri Avinashilingam Home Science College dated 23rd July 1971 to the Secretary, Department of Social Welfare, Government of Tamil Nadu, Madras-9

As desired through your telephonic request I enclose herewith a note on our findings on School lunch. I am also enclosing the following reprints which have been published in scientific journals.

1. The effects of a nutritionally balanced school lunch on the growth and nutritional status of school children.
2. Effect on an experimental school lunch on the growth and nutritional status of children.
3. Effects of school lunch with Indian multipurpose food, skim milk powder or their combination on the nutritional status of children.
4. Effect of supplementation of skim milk and its combination with multipurpose food or red gram dhal on the nutritional status of children.
5. Effects of supplementation of two school lunch programmes with neera on the nutritional status of children.
6. Nutrition evaluation of school lunch programme in two selected villages.
7. Nutritional comparison between CSM and skim milk in a school lunch.

With regards,

'True Copy'

SRI AVINASHILINGAM HOME SCIENCE COLLEGE COIMBATORE 11
Our studies on the Effects of the school Lunch Programme on the Nutritional Status of the children

Rajammal, P. Devadas,
M.A., M.Sc. Ph.D.
(Chio State)
Principal

Introduction

Since the inception of the postgraduate programme and research in nutrition in Sri Avinashilingam Home Science College, we have been intimately connected with the organisation and implementation of the Tamil Nadu Mid-day Meals Programme. Our efforts started in 1962-63 with 30 children

in Sri Avinashilingam Basic School and today it caters lunches to 120 children. The school lunch programme in our school is an educational programme and along with providing nutritious meals, it also aims at providing nutrition education. Children help in the various activities of the programme like serving, washing, cleaning and gardening under the guidance of the staff. All our research has shown that the nutritional status of children in the mid-day meals scheme is better than that of their counterparts who are not participating in the school lunch programme, although most of them hail from affluent homes.

Details regarding the lunch : Cost and quantity of foods :

The school lunch is planned to provide more than 1/3 of the days requirement as recommended by the Indian Council of Medical Research (1968) within the 10 ps. per child per day of the Tamil Nadu Mid-day-Meals' scheme. The cost and quantity of the food given are :

The Cost and Quantity of Foodstuffs used per Child per Meal

Food stuffs	Amount (g)	Cost (paise)
Rice or Bulgar wheat	75	4.11
Redgram dhal	20	2.3
Greens	50	1.0
CSM	20	
Jaggery	10	1.1
Papaya/Tomoto	20	0.6
Oil	10	
		9.1

Menu

The weekly menu used in the school lunch is as follows
Weekly Menu of School Lunch

Days	Menu
Monday	Tamarind rice Greens Poriyal Tomoto/papaya CSM payasam
Tuesday	Wheat uppuma Green Kootu Tomoto/papaya CSM payasam
Wednesday	Dhal rice Greens poriyal Tomoto/papaya CSM payasam

18.2 paise for one day. Since this is used on alternate days only, the cost comes to 4.1 paise per day on an average.

Days	Menu
Thursday	Wheat uppuma Greens kootu Tomoto/papaya CSM payasam
Friday	Lime rice Greens kootu Tomoto/papaya CSM pay- asam
Saturday	Wheat uppuma Greens kootu Tomoto/papaya CSM pay- asam

Nutritive Contribution

The nutritive contribution of the school lunch is greater than one third of the allowances recommended by the Indian Council of Medical Research as shown below :

Nutritive Value of the School lunch as compared to the Recommended Allowances per child per mea

Nutrients	What the school lunch provides	1/3 of the Re-commended Allowances ICMR (1968) (5-12 years)
Calories	590-765	500-700
Protein (g)	18.4	10
Calcium (mg)	353	150
Iron (mg)	20	6
Retinol (ug)	976	150
Thiamine (mg)	0.62	0.25
Vitamin (c) (mg)	86	14

The results of some of our studies are presented in the following order :

1. Effects of the school lunch on the nutritional status of children as revealed by :

- (a) Heights
- (b) Weights
- (c) Haemoglobin level of the blood
- (d) Red Blood Cell counts of the Blood

2. Changes in Dietary Habits

3. Sociability

4. Mental Alertness

5. Attendance in the school

6. Nutritional knowledge gained by the children and

7. Parent's evaluation of school lunch

1. CHANGES IN THE NUTRITIONAL STATUS OF CHILDREN

Changes in the nutritional status of children participating in the school lunch have been assessed through changes in their heights, weights, haemoglobin level and Red Blood Cell (RBC) of blood. The mean heights and weights of 60 children (30 in school lunch and 30 not participating in school lunch) taken fortnightly during a period of five months in one study are presented in Table 1.

TABLE 1

Changes in the Nutritional Status of Children Participating and not Participating in Sri Avinashilingam Trust School Lunch programme

(Number of children in each group-30 (Experimental period-5 months)

	Mean Height (cm)		Mean Weight (kg)		Mean Haemoglo- bin g/100 ml		Mean RBC Count million c.c.	
	S.L.	N.S.L.	S.L.	N.S.L.	S.L.	N.S.L.	S.L.	N.S.L.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Initial . . .	104.5	104.0	15.9	15.9	9.4	10.0	3.8	3.9
Final . . .	106.4	105.4	17.5	16.8	11.7	11.2	4.3	4.0
Increase . . .	1.9	1.4	1.6	0.9	2.3	1.2	0.5	0.1
	0.12		7.87 ¹		0.91 ¹		6.0	

The difference between the increase in the weight, haemoglobin and RBC contents of the children participating in the school lunch and those not participating was significant. Even with regard to height, the children in the school lunch group had registered higher increases, but the differences were not statistically significant. Thus participating in the School Lunch Programme had improved the nutritional status of children.

2. CHANGES IN DIETARY HABITS

In another study the impact of children's participation in the school lunch on their food likes, dislikes and quantities consumed at home was elicited through administration of a questionnaire to their parents. Table II presents the food likes and dislikes of the children before and after participation in the school lunch as revealed by the parents.

¹Significant at one per cent level.

S.L.—School Lunch.

N.S.L.—Non-School Lunch.

TABLE 2

The Food Likes and Dislikes of Children (30) Before and After Participation in the School Lunch-Parents' Evaluation

Food	Before		After	
	Number liking	Number disliking	Number liking	Number disliking
Rice/Cereals	24	6	30	0
Greens	12	18	30	0
Vegetables	16	14	30	0
Milk	21	9	30	0

3. SOCIABILITY

The Social development of pupils participating in the school lunch was assessed through the observations of the children at play and gardening activities by class teachers every week during a period of six months in another study. The results are presented in Table 3.

TABLE 3

Scores for Play and Gardening of Children in the School Lunch and Non-School Lunch Groups

(Number of Children—16 per group. Period—6 months)

	Scores			
	Play		Gardening	
	S.L.	N.S.L.	S.L.	N.S.L.
Initial	41	39	38	40
Final	45	38	46	40
Difference	+4	—1	+8	Nil

S.L.—School Lunch.]

N.S.L.—Non-School Lunch.

+ Changes in desirable direction.

—Changes in undesirable direction.

The children participating in the school lunch showed desirable trends in sociability as compared to those not participating in the school lunch. The latter even showed negative tendencies.

Table V presents the sociability of children in terms of their conversational ability at home as appraised by their parents.

While a considerable number of children did not like green vegetables and milk before participation in the school lunch, all had started liking them after the participation.

Table 4 gives the changes in the quantities of the foods consumed in the homes by children who were participating in the school lunch. The foods selected were those served in the school meal.

TABLE 4

Changes in Home Food Consumption of 30 Pupils Participating in School Lunch

Foods	Number of children		
	Consum- ing same	Consum- ing more	Consum- ing less
Cereals	22	2	6
Dhal	26	4	0
Vegetables (Green)	6	24	0
Milk	18	12	0

It is striking to note that six children started consuming less of cereals, while 24 had increased their consumption of greens and 12, of milk. Thus definite changes in the dietary habits of children were evident due to their participation in school lunch.

TABLE 5

Sociability of Children in the Lunch Groups as Assessed by Parents
(Number of Children—30. Period—5 months)

Nature of conversation	Before joining the school lunch	After joining school lunch
Never talked	19	1
Talked to a selected few	5	2
Felt shy to talk	3	2
Talked freely	3	25

That the participation in school lunch had helped the children to become communicative is clearly evident.

Sixteen pupils in the school lunch and a corresponding group, not participating in the lunch were required to write a proverb, after being given three minutes to memorise it. Scores were assigned for the time taken to write, and also for the correctness. The teachers maintained records of the performance of the pupils in class tests. Both these were used to assess the mental alertness of the pupils. These results are presented in Table 6.

TABLE 6

**Marks Awarded to Pupils in the School Lunch and Non-School Lunch Groups
for Mental Performances**

(Number of children in each group—16) (Period—6 months)

Percentage marks	Number of pupils					
	Memory Test			Class performance		
	SL	NSL	X ²	SL	NSL	X ²
Below 35 . . .	—	1		—	—	
36-50 . . .	—	3		—	—	
51-75 . . .	—	6	17.72	2	12	13.01
76-100 . . .	16	6		14	4	

¹Significant at 0.05 level.

S.L—School Lunch.

²Significant at 0.01 level.

N.S.L—Non-School Lunch.

Sixteen pupils in the school lunch group procured more than 76 per cent for memory test, while the corresponding number in the control group was six. In class tests also, the number of children performing creditably was higher in the school lunch group. These differences were statistically significant. The superior performance of the school lunch group is a testimony to the fact that a nutritionally balanced lunch is an asset to the mental development of the growing children.

Attendance in the School

That the attendance in school is influenced by the participation in the school lunch programme is shown in Table 7.

TABLE 7

**Attendance of the School Lunch and Non-School Lunch Groups
(Number of children in each group—30)
(Experimental period—5 months)**

Groups	Number of days	
	First half	Second half
School Lunch	59	68
Non-School Lunch	68	59

The percentage of attendance of the school lunch group improved from the first half to the second half of the experimental period, while there was a decrease in attendance of the non-school lunch group during the second half of the period.

Nutritional Knowledge Gained by the Children

In a study with children participating in the school lunch programmes of three different schools in Coimbatore District, nutrition education was found to be an integral part of the programme only in one school, Sri Avinashilingam Basic School. The nutritional knowledge gained by the children is presented in Table 8.

TABLE 8
Nutritional Knowledge of Children Participating in three School Lunch Programme.

(20 in each group)		(Period—5 months)		
Questions	Answers	Number in answering in		
		SA	M	SR
1	2	3	4	5
Why do we eat food ?	1. Food make us: Healthy	20	2	4
	Strong and big	20	2	2
	Beautiful	10	—	—
	2. Food supplies us energy to study well	18	—	—
What are the foods you like most? Why?	3. Rice, Chappathies.			
	Because we feel hungry	6	10	12
	Greens give us vitamins	18	—	—
	Milk :			
	Give to get good red blood	4	—	—
What are the foods we need daily ?	To get fair complexion	2	—	—
	4. Milk	17	2	—
	Greens	20	1	1
	Sprouted green gram	20	—	3
	Tomatoes	18	—	—

S.A.—Sri Avinashilingam Elementary School.

M.—Municipal Elementary School.

S.R.—Sri Ramakrishna Mission Elementary School.

It is clear from Table 8 that when nutrition education is an integral part of the lunch programme, there is a definite influence on the nutritional knowledge of children participating in it. Children then come to know that good food is essential for health, vigour and vitality. They also learn the foods which are important in building up the tissues of the body such as the Red Blood Cells. They appreciate that protein, vitamins and minerals are obtained from foods like milk, dhal, greens and fruits.

In contrast, children who are participating in school lunch programmes without nutrition education, do not relate the food they eat to health. These different responses stress the profound influence that nutrition education exerts on the nutritional knowledge of children, their food likes and dislikes, food habits and quantities of food consumed in the homes. Thus, school lunch serves as a multi-purpose approach to nutritional improvement.

Parents' Evaluation of School Lunch

Another study on the impact of the school lunch programme on the food habits of 100 families from two selected schools namely Sri Avinashilingam Basic School and Ramalingam Colony Municipal School indicated that :

(1) The parents of the children of the school lunch group which received nutrition education were more conscious of the objectives of the school lunch than those of the non-school lunch group;

(2) The parents of the lunch group knew more about the school lunch preparations, than those of the non-school lunch group;

(3) Parents of the school lunch groups considered leafy vegetables and millets important for the growing child in addition to cereals, other vegetables and protective foods;

(4) The consumption of leafy vegetables and millets like ragi, chole and wheat was also high among the school lunch groups which is reflected in the use of specific food groups and the meal patterns of the family;

(5) The School lunch programme had a significant influence on changing the dietary habits of children; and

(6) A large number of children in the school lunch group demanded consistently from their mothers, the type of foods served in the school lunch.

'True Copy'

Sd/-

Superintendent.