

**STRENGTHENING THE DELIVERY OF SERVICES OF
'INTEGRATED CHILD DEVELOPMENT SERVICES' (ICDS) PROGRAMME
THROUGH NATIONAL SERVICE SCHEME (NSS) INTERVENTION**

BY

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DECLARATION

I here by declare that this thesis "**Strengthening the Delivery of Services of 'Integrated Child Development Services' (ICDS) Programme through National Service Scheme (NSS) Intervention**" is the result of investigation carried out by me in the Department of Home Science Extension Education, Avinashilingam Institute for Home Science and Higher Education for Women (Deemed University), Coimbatore, for the award of the **Degree of Doctor of Philosophy in Home Science Extension Education** under the supervision and guidance of **Dr. K.Thangamani, M.Sc., M.Phil., Ph.D.,** Reader, Department of Home Science Extension Education and that it has not been submitted for the award of any Degree/Diploma/Associateship/Fellowship or similar title of any other University or Institute.

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CERTIFICATE

This is to certify that this thesis entitled "**Strengthening the Delivery of Services of 'Integrated Child Development Services' (ICDS) Programme through National Service Scheme (NSS) Intervention**" submitted to the Avinashilingam Institute for Home Science and Higher Education for Women (Deemed University), Coimbatore, for the award of the **Degree of Doctor of Philosophy in Home Science Extension Education** is a record of original research work done by **K. Vasantha, M.Sc., M.Phil.**, during the period of her study in the Department of Home Science Extension Education, Avinashilingam Institute for Home Science and Higher Education for Women (Deemed University), Coimbatore, under my supervision and guidance and the thesis has not formed the basis for the award of any Degree/Diploma/Associateship/Fellowship or similar title to any candidate of any other University or Institute.

K. Vasantha 30.12.98

Signature of the Supervisor



Signature of the Head of the Department

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INTRODUCTION

INTRODUCTION

Many of the things we need can wait, the child cannot ;
Right now is the time, his bones are being formed ;
His blood is being made and his senses are being developed ;
To him we cannot answer tomorrow ; His name is "today".

- Gabriela Mistral

Today, India's population is 936 million, out of which the child population under 5 years, accounts for 105.9 million (11.3 per cent). The physical and mental health of a nation is determined by the manner in which the life of its child is shaped in the early stages (Mahanthi, 1993). The importance of child welfare services lies not only with the immediate health, development and security of children within a country, but also lies with conscious acknowledgement of the fact that the personality of human being is built up in the formative years of the child (Sheith, 1993).

Investment on the health, growth and development of the children is an important indicator of a nation's prosperity and progress (UNICEF, 1996). Introducing the National Policy on Children in 1974, our late Prime Minister Smt. Indira Gandhi (1984) exhorted that nature has endowed each child with curiosity, great sensitivity and intelligence and these qualities must be developed to the full so that the child may realise its full potential and make the world richer (UNICEF, 1989). The policy further spells out children's programmes with a focus on areas such as child health, child nutrition and the welfare of handicapped and destitute children (Mahadevan, 1989). However, despite the progress achieved in various fields since Independence, the quality of life of most children remains sadly below the standards envisaged by the National Policy on Children (NIPCCD, 1990).

Development programmes for children have been executed as an integral part of the national five year plans. The Fifth Five Year Plan recognised the importance of a holistic and integrated approach to child welfare. This realisation paved way for the introduction of the Integrated Child Development Services (ICDS). The target of the Sixth Five Year Plan was to provide immunization and health checkup to 104 million children; supplementary nutrition to 6.1 million children and 1.2 million pregnant and nursing mothers and non-formal means of education to three million children through the Integrated Child Development Services Programme.

In the Seventh Five Year Plan, early childhood education was proposed to deal with nutrition, health care and social welfare as a package within the broad framework of the programme of ICDS so as to inculcate in the children "a healthy attitude to school going to help increase their retention rate in school" (Kurup, 1990). Since human development was the main focus of the Eighth Plan, policies and programmes relating to child survival and development received high priority. Thus the ICDS, started in 1975, remains the single largest countrywide centrally sponsored nutrition intervention programme for child development and adopts a holistic approach to improve both prenatal and postnatal environment of the child.

In ICDS, a package of services is rendered essentially through the Anganwadi, the grassroot level child welfare centre, based primarily on the consideration that the overall impact on the children would be much greater if different services are delivered in an integrated manner. For instance supplementary feeding for malnourished children becomes effective if accompanied by health checkup, diarrhoea management, clean water, mental

stimulation and basic health education for mothers. Both health and social components of the package are equally important and mutually dependent. The package of services includes non-formal pre-school education, supplementary feeding, periodic health checkup, immunization, monitoring of growth, referral medical services and nutrition and health education for mothers (NIPCCD, 1992 and UNICEF, 1989). Among these, supplementary nutrition, immunization, health checkup and referral services are provided to children below six years of age and expectant and nursing mothers. Non-formal pre-school education is imparted to children of 3-6 years and nutrition and health education to women of 15 - 45 years old (Agarwal, 1990 and ICDS, 1990).

The ICDS team comprises the grassroot level workers, namely, Anganwadi Worker (AWW) and helper who provide the services, the supervisor and the Child Development Project Officer (CDPO) who is the team leader. The Medical Officer, Lady Health Visitors (LHV) and Female Health Worker (FHW) from the health sector, work in close collaboration with the ICDS team in providing health services.

The AWW plays a crucial role in providing the services in the Anganwadi. She is often selected from the local community and serves as a crucial link between the community and the Government administration (Tandon, 1991). As the AWW is the "key functionary" of ICDS, the success or failure of the scheme depends on her capacity. Hence building her capacity is an important input for the successful implementation of the programme (Shah, 1991). As Indirabai (1991) has enunciated, the desirable traits or qualities of an AWW are, physical fitness, mental ability (intelligence), sensitivity, initiative,

enthusiasm, teaching ability, communication skill, administrative capacity and creativity.

Ever since inception, ICDS has been an inter-sectoral programme, utilising the resources of other development departments, NGOs and educational institutions. The educational institutions in India, particularly those at the higher education level, have been contemplating on their involvement in the developmental activities in the country. On the recommendations of the policy framing bodies and the several National Education Commissions, the National Service Scheme (NSS) was created in 1969 - 70 to provide an avenue for the student youth in the Colleges and Universities to channelise the youth power towards the service of the community. The programme sponsored by the Department of Youth Affairs and Sports of the Ministry of Human Resource Development of Government of India, is monitored by the State Government and implemented by the respective Universities and Colleges. The programme aims to arouse the social consciousness of students and utilise their education for the uplift of the community around (NSS, 1996). The programme has been envisaged to be voluntary. In India, about 200 Universities involving more than one million volunteers are actively participating in the NSS programme.

In NSS, there are two types of programmes. They are (a) regular NSS programmes under which students undertake various activities in the adopted villages , urban slums and college campus during weekends or after college hours and (b) special camping programmes, under which camps of 10 days duration are organised in adopted villages or urban slums during vacations with some specific projects in hand and with involvement of the local community.

The NSS programmes undertaken either under regular or special camping covers four aspects :

- Institutional Work : The students may be placed in selected welfare agencies outside the campus to work as volunteers.
- Institutional Projects : Improvement of campus, construction of play fields, swimming pools, etc.
- Rural Projects : Eradication of illiteracy, minor irrigation works, agricultural operations, health, hygiene, sanitation development of rural roads, etc.
- Urban Projects : Adult education, welfare of slum dwellers training in civil defence, first aid, hospital work, etc.,

While ideologically participation in NSS by the students is purely voluntary, several Universities committed to service as their social obligation, have been attempting to make the programme an integral part of the curriculum of Higher Education with academic weightage. Avinashilingam University, Coimbatore, TamilNadu is one such University where the educational ideals are always linked to societal needs. Ever since 1991 -92, the University, had incorporated NSS as a curricular component involving all undergraduate students and B.Eds (Bachelor of Education). Appendix I gives details of the pattern evolved for NSS in the University (Figure 1 is in Appendix I).

The University which is an institute for Home Science and Higher Education, through the various programmes related to community nutrition and child development, had already been committed for mother and child care in the locality. When planning NSS in the curriculum, the University authorities felt it appropriate to involve the NSS students in mother and child care activities. It is in this context the NSS intervention was brought forth in the ongoing

ICDS programme of Coimbatore Corporation where 365 Anganwadis functioned under four ICDS area specific projects. It was decided to involve the second and third year NSS students in the programmes of the Anganwadis after a thorough orientation about the ICDS programme particularly the package of delivery of services, namely non-formal pre-school education, supplementary nutrition, health checkup and immunization, referral services, health and nutrition education for mothers and community participation.

This research study on "Strengthening the Delivery of Services of 'Integrated Child Development Services' (ICDS) Programme through National Service Scheme (NSS) intervention" is an attempt to assess the extent of involvement of the NSS students in the delivery of the various services through the Anganwadis and the outcomes of such involvement in quantitative and qualitative dimensions. The following are the specific objectives of this action research study :

- study the profile of selected Anganwadis in Coimbatore Corporation.
- strengthen the Delivery of Services of ICDS through NSS intervention.
- buildup the capacity of the AWWs in monitoring the delivery of services of ICDS and
- assess the outcomes of the efforts putforth by NSS over a period of time.

REVIEW OF LITERATURE

II REVIEW OF LITERATURE

The literature pertaining to this study is reviewed under the following headings :

- A. Health and Nutrition Programmes for Women and Children in India and
- B. Integrated Child Development Services (ICDS) Programme in Operation

A. Health and Nutrition Programmes for Women and Children in India

According to Jawaharlal Nehru, " the care of the child is of the greatest importance, for out of this will grow the man and woman of tomorrow". In this perspective, development of child appears in the forefront. His health, his physical and moral strength, his education and his personality will determine the future of the whole nation (Mahanthi, 1993).

Health and human development form integral components of the overall socio-economic development of any nation. Health which is a state of complete physical, mental and social well-being and not merely the absence of illness, disease or infirmity, is a fundamental human right (WHO, 1991). When the nutritional status is poor, the person loses resistance to diseases and becomes vulnerable to illhealth. At least 30 to 40 per cent of India's population are trapped in the vicious circle of poverty, malnutrition and diseases resulting in reduced work performance, nullifying all efforts undertaken for national development and progress (Sulochana and Sugumar, 1988).

Protein energy malnutrition leading to Kwashiorkor and marasmus, nutritional blindness due to vitamin A deficiency, iodine deficiency disorders

and iron deficiency anaemia have been identified as severe nutritional problems in India as revealed in the extensive diet surveys conducted among populations in different parts of the country by the National Institute of Nutrition and the National Nutrition Monitoring Bureau (Murthy, 1991). Good nutrition forms the basic component of health and in particular of optimal child growth, development, survival and maintenance of health throughout life (Nakajima, 1991). The different surveys show that only about 10 per cent of the rural children are normal and a majority exhibit mild or moderate malnutrition and 8.7 per cent are 'severely' malnourished (Reddy *et al.*, 1993).

The Infant Mortality Rate (IMR) and Under 5 Mortality Rate (U5MR) are valuable indicators of the nutritional status of the society. In India the IMR was 83/1000 live births in 1992 although it has declined from 144 in 1960 and the U5MR was 124 /1000 live births in 1992 occupying the world's 42nd position in the descending order (UNICEF, 1994). Further, there are large and consistent differences in these mortality rates between urban and rural areas, the rural values being more than that of the urban (Reddy, 1993).

Maternal mortality is a reflection of women's poor nutrition and health status and high fertility. The Maternal Mortality Rate in the country had been estimated at 460/100000 live births in 1992 (UNICEF, 1994) . About one sixth of these were due to anaemia-a condition which can be prevented through supplementation of iron and folic acid during pregnancy. Haemoglobin surveys among pregnant women revealed that as many as 87.5 per cent were anaemic (Hb < 11 gms per cent). Above 13 per cent were severely anaemic (Hb < 7 gms per cent) and 33.6 per cent were moderately anaemic, having Hb 7 to 9 gms per cent (Reddy, 1993).

According to UNICEF, (1993) in developing countries each year, around 12.2 million children die under the age of five years. The fact that most deaths are caused by just five conditions, ie. acute respiratory infections (ARI), diarrhoea, measles, malaria and malnutrition. (Figure 2).

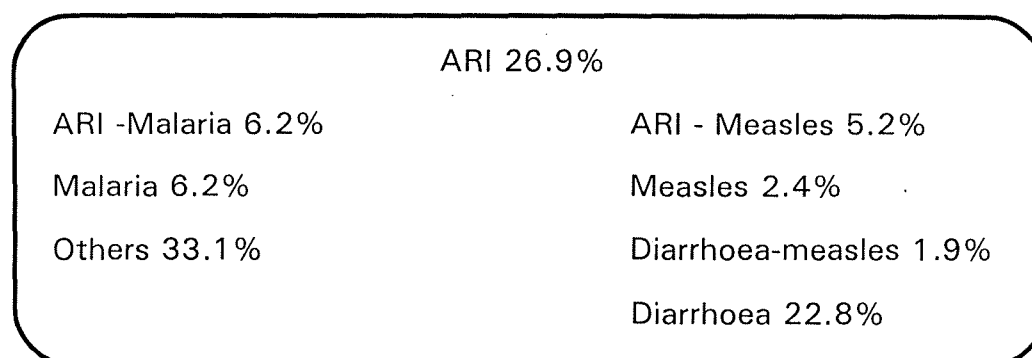


FIGURE 2

**DISTRIBUTION OF 12.2 MILLION DEATHS AMONG CHILDREN LESS THAN
5 YEARS OLD IN ALL DEVELOPING COUNTRIES**

Thus the deaths caused by these conditions would not, in itself, necessarily argue for an integrated approach to deal with them. What does, however, is the fact that most sick children present with signs and symptoms related to more than one of these conditions. A single diagnosis is often not apparent or nor appropriate.

The most common cause of undernutrition is a demand factor and not a supply factor. Employment of the poor should be expanded and their productivity increased. Apart from this, basic nutrition, primary health care, elementary education, safe water supply and clean environment are the basic necessities which need to be satisfied to improve the overall health and nutrition of the community (NIPCCD, 1990).

Education plays an important role in India's fight against malnutrition and is one of the pre-requisites for improving the nutritional status of any age group. The earlier the nutrition and health education is imparted to the child to promote positive health practices, the more likely is the possibility of the child realising his full potential for a creative life, marked by freedom and dignity (Devadas, 1982).

Nutrition education should be practical and adopted to suit the socio economic conditions, food habits and local food resources. It should include effective demonstration feeding in which mothers should take active part. It should form a part of all the developmental programmes for the community (Swaminathan, 1985).

Women's status of health is closely related to the nutritional status of the child. Undernourished mothers frequently give birth to low birth weight babies jeopardising both the children's survival as well as their growth and development potential. It is estimated that 21 million low birth weight babies are born annually of which 20 million are in the developing countries. It is this segment of population that enters labour force with low education and low productivity. It is very important that health and nutrition well-being of the mothers are given priority because they are the producers of the future labour force. Food taboos often restrict good foods at the critical time of pregnancy and lactation. Maternal morbidity, frequent birth, heavy household work and lack of opportunities contribute to the low health profile of women and girls in the 40 to 50 per cent of the population below the poverty line (FAO/WHO, 1992).

In India, women's health is mainly threatened by poverty, large sized families, early marriages, repeated pregnancies, high mortality among mothers

and children, ignorance, illiteracy and lack of material resources of food, shelter, clothing and employment (Venkatachalam and Robello, 1989). Women's health is one of the major programme activities of the WHO and is broadly subdivided into a. maternal and child health care, b. human reproduction, c. nutrition and d. health education. The objective of this programme activity is to assist government in their efforts to reduce infant and maternal mortality, to advise on various aspects of family planning, to sponsor and coordinate studies on the scientific aspects of human reproduction in collaboration with FAO, to advise on ways of solving problems of malnutrition and to promote education of all members of the family in the basic requirements for healthy living (Anuradha, 1994).

In most countries, it has been proved that a higher level of education for adult women has a most positive effect on the health of their children which also requires the improvement of the mother's health status. Just as the importance of women's educational level for improving their health and that of their children has been demonstrated at the national level, it has also been proved at the family level. When the mother's educational level is higher, infant mortality decreases regardless of the family's socio-economic level. This is true if the father is also literate (UNICEF, 1992).

To tackle the problem of malnutrition among children it is therefore necessary to educate women, especially rural mothers of all pre-schoolers about health and nutrition. Supplementary feeding programme in pre and primary schools constitute one of the most promising and effective measures to overcome malnutrition among the children and mothers. Supplementary nutrition means identifying and fulfilling the deficiencies of calories, protein, minerals and vitamins in the existing diets (Bhaskaran, 1991).

The interrelations between the mother's diet during pregnancy, the infant's birth weight and subsequent health status proved by numerous studies, have led many countries to establish food supplementation programmes for pregnant and lactating women along with those for children. Their objective is to increase the mother's food intake in order to improve the nutritional status of the mother child dyad. Supplementation may enable mothers to be more active, physically during their pregnancy and breast feeding period. When the mother is more active, her relationship with her child improves and this in turn contributes to the child's better psycho-motor development (Udani, 1990).

With recent advancements in science and technology it is now possible to achieve dramatic improvement in the health status of children. Improved techniques of immunization and more effective methods of treatment for common childhood ailments such as dehydration, respiratory infections and malaria together with better understanding of breast feeding, birth spacing and safe motherhood, have made it possible at an affordable cost to build a wall of protection around the growing minds and bodies of children (UNICEF, 1990).

The Union Ministry of Health and Family Welfare plays a vital role in the national efforts to help citizens lead a healthy and happy life. The Ministry is responsible for implementing programmes of national importance like family welfare, primary health care services, prevention and control of diseases etc., which form the main plank of our development efforts (UNICEF, 1995).

Many feeding programmes have been in operation in India over the past three or more decades under the auspices of government and/or voluntary bodies.

The chief among the nutrition programmes are :

1. Mid-day Meal Programme (1962)
2. Applied Nutrition Programme (1963)
3. Family and Child Welfare Feeding Programme (1967)
4. Balwadi Nutrition Programme (1970)
5. Special Nutrition Programme (1970)
6. Tamil Nadu Integrated Nutrition Project (1980)
7. Tamil Nadu Chief Minister's Nutritious Meal Programme (1982)
8. Integrated Child Development Services (1975)

These programmes were coordinated by different departments of the State and Central Governments. Their cost, organisation, mode of operation and evaluation differed from each other.

1. Mid Day Meal Programme

The Mid-day meal programme was initiated in 1962-63 and was extended to the entire country in subsequent years. The specific objectives of the programme were, to raise the nutritional status of primary school children particularly those belonging to low socio economic group, improve the attendance and enrolment in schools and prevent dropout from primary school.

The beneficiaries were children attending the primary school (6 to 11 years of age). The children belonging to backward classes, scheduled caste and scheduled tribe families were given top most priority. Each beneficiary received food costing 50 paise per day; each child should receive 300 calories and 8-12gm protein per day for 200 days in a year (Ministry of Social Welfare, 1980).

2. Applied Nutrition Programme (ANP)

This programme was launched during the Third Five Year Plan in selected Community Development Blocks with the help of UNICEF as a major effort towards creating an awareness among the rural families about the importance of nutrition through education, training, demonstration and production and consumption of foods locally available. The feeding programme, by and large, was confined to children in the age group 0 to 6 years and pregnant and nursing mothers belonging to vulnerable groups (Kapil, 1990). The specific objectives of ANP were;

- a. Production of protective foods
- b. Distribution and consumption of the foods produced by the vulnerable groups
- c. Nutrition education to stimulate people and consume protective foods and
- d. Provision of health care (Murthy, 1977 and Devadas, 1978)

3. Family and Child Welfare Feeding Programme

The Family and Child Welfare Project was approved by the Government of India in the Ministry of Social Welfare in 1967 and was implemented from 14th November, 1967. The scheme was to provide integrated basic social services to children, offer basic training to women and young girls in home craft, health education, nutrition and child care as well as essential health and maternity services for women, assist women in the villages through Mahila Mandals and other agencies to obtain supplementary work and income and thus augment family welfare and promote cultural, educational and recreational activities for women and children (Gopalan, 1987).

4. Balwadi Nutrition Programme

The Balwadi Nutrition Programme was started in 1970 with the object of providing supplementary nutrition to children in balwadis in order to meet one fourth of their daily calorie requirement and about one half of the daily protein requirement. This programme was also fully funded by the central Government and implemented through national level organisations namely, the Central Social Welfare Board, Indian Council for Child Welfare, Harijan Sevak Sangh and other voluntary agencies. The grants under this programme were meant to provide supplementary nutrition diet to the children of low income group families. Each balwadi child in the age group of 3-5 years was given 300 calories and 10-12 gms of protein per day. The coverage of the programme in 1980-81 was 6059 balwadies with 2.29 lakh beneficiaries (Devadas, 1992).

5. Special Nutrition Programme

The Special Nutrition Programme was launched by the Government of India in 1970 with the object of providing supplementary nutrition to pre-school children, pregnant women and nursing mothers from the weaker sections of the community in urban slums, tribal and backward rural areas. This programme emphasised control of protein-calorie malnutrition among the vulnerable groups living in depressed and relatively inaccessible areas. It was envisaged that children below one year of age would receive about 200 calories and 8 to 10 gms of good quality protein, children between 2 and 6 years of age 300 calories and 10 to 12 gms of protein and expectant and nursing mothers 500 calories and 25 gms of protein. The feeding programme initially intended for 250 days a year was later extended to 300 days (Sumathy, 1994).

Besides the national programmes, a few state governments have initiated feeding programmes of their own. For instance Tamilnadu initiated the Tamil Nadu Integrated Nutrition Project (TINP) in 1980.

6. Tamilnadu Integrated Nutrition Project

The Tamilnadu Integrated Nutrition Project (TINP) was sponsored by the Government of Tamilnadu (1980) aided by the World Bank for the mass nutrition rehabilitation of high risk groups of the population, namely children between six months and six years, pregnant women and lactating mothers. Approaching malnutrition from three angles namely education, health and food supplementation, the project aims at significant reduction in the incidence of malnutrition, morbidity and mortality rate of children. TINP is in operation in six districts of Tamilnadu, namely Madurai, Pudukkottai, Ramanathapuram, Tirunelveli, Chengalpet and North Arcot covering 9000 villages in 169 blocks with one million children in its purview (Devadas, 1989).

7. Tamilnadu Chief Minister's Nutritious Meal Programme

This programme was started in Tamilnadu in July 1982 and it currently covers 8.3 lakh children between 2 and 15 years of age. This number includes 2.1 lakh children in 2 to 4 years age group, 4.6 lakh children in the 5 to 9 years age group and 1.6 lakh children in the 10 to 15 years age groups. The programme aimed to provide more than one-third of the nutritional requirements and thus help promote health, growth, development and learning ability of the children, entuse children to go to school and improve school attendance and foster sound social behaviour among children and dispel feelings of difference between various castes. It further wanted to inculcate good dietary and personal hygiene,

promote awareness on the importance of environmental sanitation, impart health/nutrition education to children, parents and the community, provide employment for women below the poverty line and bring about a gradual socio-economic transformation among the poor communities (Devadas, 1983).

8. Integrated Child Development Services

Integrated Child Development Services (ICDS) is the most comprehensive scheme of the Government of India for early childhood care and development. It aims at enhancing survival and development of children from the vulnerable sections of the society launched in 1975 with 33 projects on an experimental basis (Sethi, 1992 and Bakshi, 1993).

B. Integrated Child Development Services Programme in Operation

India is a party to the UNO Declaration of the Rights of the Child which gives all children without any exception the right to enjoy special protection, opportunities and facilities to enable them to develop physically, mentally, morally, spiritually and socially in a healthy and normal manner in conditions of freedom and dignity. Keeping in view the UN Declaration of the Rights of the Child and the Constitution of India, the Government of India adopted a National Policy on Children in 1974. The policy says that the Nation's children are supremely important asset. Their nurture and solicitude are our responsibility. It further spells out various measures to be adopted and priorities to be assigned to children's programme with a focus on areas like child health, child nutrition and the welfare of handicapped and destitute children (Ghosh, 1991).

In pursuance of the National Policy of Children, the Integrated Child Development Services Programme was formulated, the blueprint for which

was drawn by the Ministry of Social Welfare, Government of India in 1975. The scheme called for co-ordinated and concerted efforts by different Ministries, Departments and voluntary organisations. Considering the magnitude of the task, it was decided to set up 33 projects in 1975 - 76 ; 19 in rural, 10 in tribal and 4 in urban areas on an experimental basis. Integrated Child Development Services Programme is the world's largest child nutrition, health and mother care programme. It seeks to enhance the health, nutrition and learning opportunities for children below the age of six years and their mothers by simultaneously providing all the requisite services at the village level. ICDS provides a package of services namely, supplementary nutrition, immunization, health checkups, referral services, treatment of minor illness, nutrition and health education, convergence of other supportive services like water supply, sanitation etc., Presently the ICDS scheme is being implemented in more than 3,000 centres out of the 5,513 Community Development Blocks in the country (Raghveer, 1996).

The objectives of the ICDS are to :

- improve the nutritional and health status of children in the age group 0 -6 years.
- lay the foundation for proper psychological, physical and social development of the child ;
- reduce the incidence of mortality, morbidity, malnutrition and school dropout ;
- achieve effective co-ordination of policy and implementation amongst the various departments to promote child development and
- enhance the capability of the mother to look after the normal health

and nutritional needs of her child through proper nutrition and health education (NIPCCD,1992).

Package of Services

The services under ICDS converge at the same time on the same group of children. This pattern is based on the concept that services for children must operate together for any of them to have durable value and for their total impact to be more than the sum of their separate effects. For instance, supplementary feeding for malnourished children becomes effective if accompanied by health checkups, water and sanitation, mental stimulation and basic health education for mothers. In selecting the services, therefore, priority is given to the most urgent needs. Thus the package of services includes, non-formal pre-school education, supplementary nutrition, immunization, periodic health checkups, referral medical services and nutrition and health education for mothers (NIPCCD, 1994).

a. Non-formal pre-school education

The biggest and the most important business in the world, the business which out weigh all other values is the education of children (Chishlon, 1989). Pre-school education brings about an improvement in various inter-related dimensions of child development such as social, emotional and cognitive. Physically their development proceeds at a rapid pace. These are the years when both large and small muscle coordination is developed. Cognitively, they develop ability to use symbols in their thoughts and action. They are aslo able to handle more efficiently the concept such as age, time, space, moral judgement and relationship between different objects. The cognitive power develops

enormously during this stage. They judge, perceive, retain images and ideas through sensory experiences and thus add to their knowledge repertoire (Sood, 1992 and Sunderlal, 1993).

The ICDS has non-formal pre-school education as an important component in its package. Pre-school education in non-formal setting forms the backbone of the ICDS programme. Children between the age group of 3 - 6 years attend the Anganwadi for 3 hours a day. The main function of pre-school education component is to stimulate and satisfy the curiosity of the child rather than following rigid learning curriculum (Dinesh, 1991).

For pre-school education the AWWs are expected to organise simple play and recreational activities at the Anganwadi (Sood, 1994). In pre-school, children gather information and form them into pattern of knowledge that become integrated with their life. Children begin to work and play co-operatively with other children. In their play, they show skill and ingenuity. These are the years of the 'flowering of the self' (Devadas, 1991)

The objectives of pre-school education component of the ICDS are to,

1. develop adequate muscular coordination and basic motor skills in children.
2. develop creativity as aesthetic appreciation and elementary sense of hygiene.
3. provide opportunity for interacting with other children of the same age group.

4. develop in the child the ability to express his thoughts and feelings in fluent, correct and clear language.
5. develop the habits of attending the Anganwadi regularly (Harit, 1988).

Non-formal pre-school education is a very crucial component of the package of services envisaged under ICDS as it seeks to lay the foundation for proper physical and social development of the child. Non-formal education is imparted to children in the age group of 3 to 5 years at the Anganwadi (Joshi, et al., 1992).

A study was conducted by Muralidharan and Banerji (1980) to assess the impact of an intervention programme on the language and cognitive development of tribal pre-school children. The study was done on 144 children of Tokapal ICDS block in Madhya Pradesh. A matched experimental control group was taken and pre and post test design was followed. The AWWs of the experimental group were given ten days orientation course. The results showed that in most of the tests, the experimental group showed a higher gain than the control group in both urban and tribal areas and they have concluded that no matter how disadvantaged the children are, well planned early child education strategies make an impact and foster the development of children.

A comparative study of cognitive and social development of urban and rural pre-school children was undertaken by Saraswati (1977-1979). The social and cognitive development of the urban children was found to be better than that of rural children. The cognitive and social developments were related to variables like educational and occupational level of the parents, size of the family and family income.

Sahani and Agarwal (1985) conducted a study entitled " An intervention in ongoing ICDS programme to promote cognitive abilities of preschoolers in Haryana". The sample comprised 100 well nourished children in the age group 3.3 years. The results showed that significant differences were observed in the knowledge and skill of AWWs and cognitive abilities of pre-school children before and after intervention. The children were significantly associated with post intervention cognitive abilities.

b. Supplementary Nutrition

Supplementary nutrition means identifying and fulfilling the deficiencies of calories, proteins, minerals and vitamins in the existing diets, avoiding cut-backs in the family diet and taking other measures for nutritional rehabilitation. Supplementary nutrition will be given to needy children below six years of age and to nursing and expectant mothers from low income families. Generally speaking, the aim is to supplement the nutritional intake by about 300 calories and 8 - 10 gms of protein for children below 6 years of age and about 500 calories and 20 - 25 gms of protein for pregnant women and nursing mothers. The supplementary nutrition will be given for 300 days in a year. The average cost of food is estimated as 25 paise per child per day and 50 paise for a pregnant woman per day. The average cost per day in case of severely malnourished children is estimated as 60 paise per child (ICCW, 1995).

As for supplementary feeding, most studies point out that proportionately much higher percentage of 3 - 5 years old are covered under supplementary nutrition than 0-3 years old. Sharma (1987) noted that the difference in coverage across age groups could be attributed to the inability of the children between

0-3 years to come to AWs on their own. The need for someone to accompany them imposes a constraint on their coverage . Almost all the scheduled caste and scheduled tribes attending AWs seem to be receiving supplementary nutrition. To this extent, the "area targetting" implicit in the programme is rendering it accessible to the scheduled castes provided they attend the AWs. But at the same time as shown by Anderson and Ann (1987), many children need especially in the age groups 0-3, both scheduled castes and others, do not get food because they do not attend the AWs. Sharma's (1987) study based on a sample covering many states, also concluded that while more than 60 per cent of the beneficiaries of supplementary feeding were from households below the povertyline, the participation of the children between 0-3 years was low and even showed some decline especially in rural and tribal blocks. An extensive review of earlier research on supplementary feeding in ICDS has pointed out that the duration and regularity of feeding, varied a great deal and was frequently less than the prescribed 300 days; the study also argued the case for a review of the screening, selection and coverage of eligible children for feeding so that children most in need get the supplement (Khanna and Ohri, 1986). A recent study by NIPCCD (1990) confirms these earlier findings. It is interesting to note that food supplies were erratic even in a state like Punjab where food is otherwise.

An evaluatory study on the supplementary feeding programme for Anganwadi children in the rural areas around Hyderabad city (Swaminathan, 1980) proved that the programme had substantially improved the protein calorie nutritional status of the children. The results of the attitude survey of the community revealed that a substantial majority were in favour of

the programme and endorsed the need for its continuation, since they realised that it has benefitted their children. Economic and social status, literacy and availability of time were found to be some of the factors which influenced not only the attitude but also the active participation of the community in the programme.

c. Immunization

ICDS has played a significant role in improving the immunization status of children, pregnant women and nursing mothers (Subramanian, et al., 1989). Right from the birth, children are exposed to various health hazards including communicable diseases. ICDS plans to give immunization against tuberculosis, diphtheria, whooping cough, tetanus, measles and polio to all children under one year of age and immunization against tetanus to all the expectant mothers (Chandha and Sen, 1993).

Vasudeva (1983) studied 171 children from ICDS blocks and 164 children from non ICDS blocks. Their immunization status was determined from the records available at the Anganwadis and sub centres. This study indicated that immunization coverage in ICDS blocks is better than in non ICDS blocks.

On the other hand a study of deaths in eight AWs over a period of one year in Medak District, Andhra Pradesh, by Reddy and Reddy (1993) recorded that there were 47 child deaths ; nearly 1/3 of the deaths took place before the first birthday. The study showed that nearly 25 out of 47 deaths were preventable via immunization and / or ORT. If ORT and immunization were systematically practised in the Anganwadis, the mortality rate could have fallen.

Chandrasekharan (1989) conducted a study on "Immunization status of children in the age group of 0-6 in two selected slums of Hyderabad". Out of hundred families, 50 families were having children below 6 years of age and the parents were asked to furnish information on the immunization status of their children. It was observed that only 62 per cent of the children were immunized with all the available vaccines as per schedule. The rest of the parents were not aware of the importance of immunization due to illiteracy, negligence and ignorance.

A study undertaken by Kamalanathan and Baradha (1984) to assess the nutritional status, morbidity pattern, emotional and social behaviour of children attending Anganwadis, with the sample comprising 200 children in the age group of 3-4 years with an equal sex representation reveals that, fifty five per cent children were normal, 45 per cent suffered PEM Grade I, II and none were in PEM IV. Sexwise prevalence of malnutrition revealed that female children suffered slightly more (53 per cent) than male (38 per cent).

d. Health checkup and referral services

This service includes antinatal care of expectant mothers, postnatal care of nursing mothers and care of new borns and children under six years of age. The health checkup and medical care will be rendered by the ANMs and LHVs under the guidance of the PHC. Primary Health Care of a simple nature is also supposed to be rendered by the Anganwadi workers. For this purpose, AWWs are given a medical kit which would be replenished at regular intervals after checking the expenditure register (ICDS, 1990).

The purpose of referral services is to provide medical care of an appropriate standard according to the seriousness of the disease as well as follow up care of cases that have been treated or given medical attention. Pregnant mothers and children with problems requiring specialised treatment will be referred by the AWW, ANM or LHV to the PHC/upgraded referral hospitals. The cases needing further attention or treatment will be referred by the medical officer of PHC/referral hospitals to the taluk/city/district hospitals as the case may be. The medical officer incharge of PHC will refer such cases with a referral card prescribed for the purpose. In case of an urban project, the cases will be referred to the appropriate health clinics/hospitals (UNICEF, 1993). In another study, 20 Anganwadi centres from each of the four projects in Coimbatore City were studied. The findings are thus.

- 97 per cent centres carried out the immunization programme regularly and
- the health checkup and referral services were carried out regularly as per the strategy of the ICDS. (Jaya and Saroja Devi 1984).

e. Health and Nutrition Education (HNE)

The health and nutrition education component of the ICDS aims at effective communication of certain basic health and nutrition messages with a view to enhancing the mother's awareness of the child's needs and her capacity to look after these within the family environment. Nutrition and health education is required to be given to all women in the age group of 15-44 years and other members of the family (Ashok, 1993). Nutrition and health education component of ICDS aims at enhancing knowledge and awareness of the target

women to handle problems like ill health, basic health and nutrition messages, and effective communication can go a long way in improving the well-being of children and family (NIPCCD, 1992).

Begum and Malathi (1984) conducted a study on "Nutrition knowledge, attitudes and practices of rural mothers trained by Anganwadi workers" in an urban ICDS block, Anakal, Karnataka. The sample comprised of 80 mothers. There was a significant difference in the knowledge of the trained and untrained mothers on certain aspects like hygiene, sanitation and deficiency diseases. Nutrition knowledge and practices were influenced considerably by associated socio-economic factors in both the trained and untrained mothers. Attitude towards nutrition was not associated significantly with any socio-economic factor. Nutrition knowledge and practices were significantly correlated with each other. Hence the training imparted by AWWs had some impact on mothers.

A study was undertaken by Booma et al., (1985) to find out mother's knowledge and awareness regarding the use for the management of diarrhoeal diseases. Though women were aware of oral rehydration solution, yet it was not used. This was due to the influence of elders in the family and traditional beliefs regarding etiology and management of diarrhoea. Further this study reveals that about 91 per cent of the children in the age group of 1- 5 years from the selected areas were found to be well nourished because their mothers continued to breastfeed them even during diarrhoea. Children were given their normal diet in a semi-solid form.

To assess the level of health and nutrition knowledge and practices of the mothers, a study was conducted by Seshadri and Gopaldas (1986) in

Baroda. The findings revealed that they were neither aware of the value of the growth charts in monitoring the health of the child nor of oral rehydration therapy for diarrhoeal diseases. Their knowledge regarding immunization schedule was poor. Breastfeeding was universally practised and most of the mothers were aware that breast feeding kept the child healthy. Late weaning and inadequate feeding of toddlers were also observed in the community. Mothers were in lack of knowledge regarding causes, symptoms and prevention of major nutritional diseases prevalent in the community.

The health and nutrition education component of ICDS needs to be strengthened. The role of training, use of mass media and the contents need to be further reviewed and analysed to make the components effective (NIPCCD, 1990).

f. Community participation

The success of any welfare programme depends on the support and co-operation it receives from the community. The scheme has a built-in mechanism of involving the community. Community education which enhances community awareness about child care, would be the starting point for its participation (Sharma, 1990 and Dev, 1992).

Despite the built-in element of community participation, ICDS has not been able to involve the community to the desired level. Most of the studies have indicated that the beneficiaries have low awareness about the scheme, its components and possible benefits they can derive from it (NIPCCD, 1988 and Rifkin, 1990).

The community's reaction to the ICDS scheme and the services offered by it in six Anganwadis of Kathura ICDS project was assessed in another study by Kumar (1986). The community perceived non-formal pre-school education as a mere preponement of formal education. None of the community members considered supplementary nutrition as a substitution. A majority of the community members perceived health checkups in relation to disease only. The reactions to immunization appeared favourable. The study reported that adult women did not favour involvement in the ICDS activities because of overwork and a busy schedule of household chores, though they all regarded the knowledge of nutrition and child rearing as essential.

A study with regard to perceptions of women beneficiaries highlighted some interesting findings. Bhatnagar and Singhal (1984) conducted a study in two randomly selected villages of Rajamand block, reveals that a majority of the participants had little knowledge of ICDS scheme and on the whole, the respondents had low expectations from the scheme. Younger women beneficiaries coming from nuclear families had higher awareness as compared with their older counterparts in joint families.

Perception and participation of the community in rural, urban and tribal ICDS blocks of Karnataka State was compared by Paranjpe and Bhagwat (1986). They reported that the general level of knowledge about ICDS was poor though it was better in rural block. A similar attempt was made by Sharma (1986) who studied the perception and participation of the community in 26 Anganwadis of urban, rural and tribal blocks of Rajasthan and it was reported that the awareness of women respondents, community leaders and project functionaries was the highest for supplementary nutrition followed by

pre-school education and immunization of children. The level of awareness and participation of women respondents and the community leaders were low in all the three projects. A majority of the project functionaries had no clear perception of the importance of community participation.

Child-related nutrition schemes are both person-intensive and resource-intensive. The responsibility of the functionaries is to see that their tasks match the needs of children and their mothers. Since young children (especially below three years of age) are in the fold of their mothers, interventions aimed at them simply cannot succeed unless there is total identity of the functionaries with the mothers. This is possible only when AWWs are able to elicit community participation. This usually implies (a) involvement of the community in achieving ICDS goals via participation in decision-making at regular working group meetings of women and AWWs; (b) contribution of the community in cash, kind, manpower and organisational help; (c) involvement of the community in the assessment of benefits from the programme and (d) regular home visits by AWWs. ICDS evaluations are unanimous on one point; the programme failed to elicit community participation in most locations. The evaluation by Sharma (1987) pointed out that since health and nutrition activities were rarely conducted in women's working groups, there was hardly any chance for mother's involvement. According to Chopdar (1989) the task of eliciting community participation is admittedly difficult in villages stratified by social barriers and economic status. This is because there is no rallying or nodal point in the villages where communities, especially of the deprived sections, can be effectively reached. So far these communities have regarded ICDS as a government service to be used in emergency and not as their own programme.

Special efforts are needed for converting the prevailing status of ICDS as a "Government Centre" into that of a "Community Centre".

In an urban ICDS project of Andhra Pradesh, Gandhi (1984) assessed the extent of community participation in the programme. He reported that 51.54 per cent of Anganwadis were being supported by way of rent-free accommodation by the local youth clubs.

In a study by NIPCCD (1984) the information collected from 42 Anganwadis in Kanhawala ICDS block showed that there was lack of communication between AWWs and various local organisations. The community was providing only marginal assistance in Anganwadi activities. On the other hand the AWWs had not made a conscious effort to establish community contacts.

A critical appraisal of all these researches indicate that the concept of community participation in ICDS is understood differently by different researches and have been tackled with different emphasis. Yet it is clear that ICDS has still not become the people's programme and many more efforts need to be put to secure community participation.

Thus ICDS is a package of integrated services for the pre-school child with nutrition, pre-school education, immunization, health checkup and mother's education. The village unit through which the services under the ICDS scheme will be delivered is the "Anganwadi". "Anganwadi" means courtyard garden, (Angan means courtyard ; wadi means garden in Gujarati language), is the focal point for the delivery of the package of services to children and mothers, living in their community. The concept of "Anganwadi" was first used officially

in 1972 in the report of Meena Swaminathan Committee on pre-school education. Later in 1975 it was incorporated in the programme of Integrated Child Development Services (ICDS) (Department of Women and Child Development, Government of India, 1990).

An Anganwadi Worker (AWW) is the key functionary of the ICDS programme, selected from the community; is incharge of the Anganwadi she assures a pivotal role due to her close and continuous contact with the community and serves as a crucial link between the village population and the government administration (NIPCCD, 1992). AWW is assisted by a part time helper. The AWW should preferably be a local person in the age group of 18-45 years.

The responsibilities of the AWW include non-formal pre-school education for the older children, organisation of supplementary feeding after identifying eligible children and mothers, imparting health and nutrition education to women, educating parents through home visits, eliciting community support and participation, primary health care for children and mothers and referring the needy to medical personnel (Under the health department) liaising with local organizations like Mahila Mandals and finally maintaining records and furnishing progress reports (NIPCCD, 1992).

The AWW receives supervision and guidance from a supervisor who normally looks after 20 AWWs. A full time Child Development Project Officer is incharge of each ICDS project. The health infrastructure in ICDS areas is provided by one AWW, one LHV (to supervise the work of four ANMs) and one doctor per block. All these health services are the responsibilities of the health

department. ICDS is thus a multi departmental endeavour and its success critically hinges on the coordination between the two departments at local level. Its success also depends to a great extent on the content and quality of training imparted to various functionaries in the programme (Adhish and Zaheer, 1990).

Since ICDS is a multi departmental and inter sectoral endeavour, co-ordination machinery is set up at all levels. At the district level the Deputy Commissioner or collector is responsible for co-ordinating the implementation of ICDS. Districts having four or five ICDS projects have been sanctioned ICDS Cells (Miglani, 1986).

At the state level, the Secretary of the Department of Social Welfare or the nodal departments as decided by the State Government is responsible for implementation. At the Central level, the Department of Women's Welfare, Ministry of Human Resource Development is responsible for budgetary control and direction. This department also co-ordinates the services rendered by the other departments and ministries namely, Ministry of Food and Civil Supplies, Agriculture, Health, Education, Energy, Urban Development and also the Planning Commission. The National Institute of Public Co-operation and Child Development is an apex organisation responsible for job training for Child Development Project Officers at its Head Quarters and also for supervisors at its Regional Field Unit.

g. Training of Anganwadi Workers

Training is the process, not the product. The purpose of training is to learn better ways of doing things, to learn new systems, procedures or tools,

to improve productivity and quality, to become more flexible and versatile to better meet the needs of the organisation to increase understanding and so forth (Rai, 1974).

The purpose of training is to change the way people behave. Without behavioural change-that is without changing the way things are actually done - there can be no impact on the organization. Attitudes, understanding and insight also can be affected by training, but unless people actually do things differently, the organisation would not have derived any benefit.

The idea of this training process is illustrated in Figure 3 as given by Berton (1996).

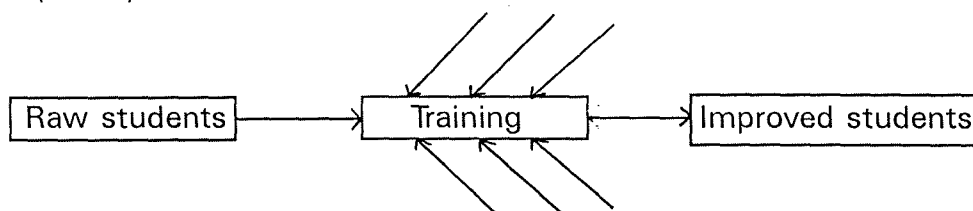


FIGURE 3

THE TRAINING PROCESS

- Inputs : "Raw untrained students"
- Process : Training (which adds value by enabling students to change their behaviour)
- Output : Value-added students who do their jobs better

Children are nation's health. We cannot afford to employ untrained teacher who are unfit or unprepared for enriching the level of children. AWWs have a vital role to play, unless they are properly equipped and trained they shall not handle their responsibilities properly (Verma and Verma, 1989).

The teacher is an important person to the young child. Each teacher serves as a model for the children in many ways. The children are influenced by her. They imitate not only her actions and moods, but also her attitudes. Teacher's attitudes are important to the young child because they become a part of what the child learns in school (Read and Patterson, 1980). The pre-school teacher is a friend and an elderly playmate and a guide, she is the pivot round which the wholesome development of the child rotates (Verma, 1989).

The training programme will enable AWWs to help the intellectual, emotional and motor development of pre-school children. Therefore Arnold (1975) emphasises that it is also important for all AWWs to be provided with appropriate programme, equipment and material for meeting the child's needs (ICDS, 1990).

As the Anganwadi worker is the 'Kingpin' of ICDS, the success or failure of the scheme depends chiefly on her. The programme cannot be a success if the Anganwadi worker is a failure. Her training, therefore is an important input for the successful implementation of the programme (Shah, 1991).

The training of child development workers has had varied beginnings in India. The impact of various thoughts on education of pre-school age children from Rousseau, Montessori to Tagore and Gandhi has influenced the concept of training of child development functionaries (NIPCCD, 1987).

Training is very important for the teacher. It is the teachers who have to shoulder the burden of the process, to be achieved by the society. A society can make allround development only if its teachers are well equipped. Teachers have a very vital role to play. Unless they are properly equipped and trained they shall not be able to know their jobs (Thombre et al., 1991). They learn

thier jobs while they are getting training. Training provides opportunities to the teachers to acquire theoretical knowledge as well as to develop practical outlook (Rai, 1974 and NIPCCD, 1984).

All the services provided by Anganwadi workers depend upon the type of training they get. In order to equip them with the necessary knowledge, skills and aptitude for their job performance a specially designed practical oriented three months training course has been prescribed by NIPCCD.

According to Sridevi (1992), before training only 46 per cent of the AWWs were aware of the collection and use locally available materials like candle, flowers, paper, stone, ball, sticks, cloth, wood, salt and sand for teaching science concepts to pre-school children. After training the percentage level was increased to 100 per cent.

A study undertaken by Subathra (1989) on the impact of training Anganwadi workers in the preparation and use of equipment and aids for pre-schoolers with the sample comprising 85 AWWs, reveal that improvements were noted in the answers of AWWs on the concept of play, significance of play, need for play materials and the use of play materials after the special training on the preparation and use of equipment and aids for pre-schoolers; all the Anganwadi workers had become aware of atleast 25 indigenou play equipment after attending the training course; AWWs (85 per cent) who attended the training course learnt to prepare more than 20 equipment and 15 aids, while only less number (6 equipments and 4 aids) were known to them earlier prior to the training course and after the training, majority of the AWWs (80 per cent) gained knowledge, on play and play equipment, how to

create indigenous items and preparation of play equipment using the waste materials and the needs for the same.

Singh (1986) found out in a study that AWWs who had undergone training 3-4 years earlier tended to show better performance than those who completed their training 5-6 years back. The study felt that it would, therefore be desirable to give the senior AWWs, a refresher training of 15-20 days periodically (NIPCCD, 1986).

A study undertaken by Mariakamalam and Jaya (1991) on training the AWWs in Timely Deduction of Disabilities in Children, reveal that the number of AWWs who become thorough with the symptoms of disabilities was remarkably high after the training ; the role perception of AWWs improved favourably after their participation in training programme ; a greater percentage of the AWWs were able to conceptualize the management and rehabilitative services for the disabled better after they underwent the training ; as a result of participation in the training programme, a substantial number of the AWWs became knowledgeable about the integrated education, reservation for employment and provision of loans for the disabled ; there were markable changes in the attitudes of AWWs (75 per cent) in that they expressed positive attitudes towards the disabled at the end of the training and ninety one per cent of the AWWs felt that methods and approaches in the training programme were simple, easily comprehensible with ideas that could be adoptable in the Anganwadi set-up.

Agarwal and Verma (1990) conducted a study to train the field functionaries for the early identification of disabled children in rural areas of

Hissar city. Seventeen AWWs from five villages of an ICDS project were selected and given training for seven days. Pre and post exposure knowledge were assessed through knowledge tests.

AWWs educational qualification, their service experiences, job satisfaction and their attitude towards disabled children had significantly influenced their acquisition of knowledge through training on identification of physical disabilities of rural children (Chetna, 1989).

Vasantha and Sithalakshmi (1989) conducted a study on the impact of the ICDS programme and their findings indicate that establishment of closer rapport between the AWWs and the community after the education programmes, resulted in better utilisation of the services of ICDS, specially for referral services and parent education programmes.

Srihari and Kamala (1992) conducted a 10 day training for the AWWs of Tirupur town in Coimbatore district on early detection, timely intervention and management of childhood disabilities. The post training evaluation pointed out an impressive augmentation in the cognizance of the AWWs trained, in relation to the different aspects taught.

The government and the donor agencies supporting ICDS now recognize the need to take a fresh look at training needs and capacity building. In particular, four shortcomings have been identified. First, the existing capacity is inadequate to meet the demands of system and as a result the backlog of trainees has been growing. Second, the training syllabus and materials are standardised and do not allow for variations to suit tribal, rural and urban areas. There have, practically been no attempts to create awareness among

METHODOLOGY

III METHODOLOGY

This chapter deals with the methodology followed in the efforts of "Strengthening the Delivery of Services of 'Integrated Child Development Services' (ICDS) Programme through National Service Scheme (NSS) Intervention" as detailed below :

- A. Studying the profile of the Anganwadis
- B. Improving the delivery of services through the Anganwadis and
- C. Assessing the impact of the efforts putforth by the NSS

A. Studying the profile of the Anganwadis

This aspect of the study consisted of the following steps:

1. Selection of the Anganwadis
2. Selection of the tools and
3. Collection and analysis of the data

1. Selection of the Anganwadis

In Coimbatore Corporation, there are four urban ICDS projects with a total of 365 Anganwadis. Out of them, 50 Anganwadis were randomly selected to study the profile (Appendix II)

2. Selection of the tools

The tools selected for the study were checklist and questionnaire. Checklist facilitates a researcher to watch the facts carefully and systematically in a natural setting (Gupta, 1991). A checklist comprising questions relating to amenities and facilities was prepared (Appendix III). A questionnaire was

constructed and administered to the AWWs to collect the information on the package of services delivered at Anganwadis in pre and post intervention of NSS (Appendix IV).

3. Collection and analysis of the data

The data collected through the checklist and the questionnaire were analysed on the following lines :

- a. Amenities and facilities and
- b. Delivery of services

a. Amenities and facilities

Effective functioning of the Anganwadis is possible only when they have sufficient amenities. The availability of amenities in the selected Anganwadis is presented below :

Tenancy

Out of the 50 Anganwadis, 32 were located in the Corporation owned buildings exclusively built for ICDS, while the rest of them functioned in the elementary school buildings (12), maternity hospital premises (4) and in private places (2).

Physical set-up

Thirty five Anganwadis had good lighting, adequate indoor space for play and creative activities. The reason for the inadequacy of indoor space in the rest of the Anganwadis was due to the merging of two centres together. Only 31 Anganwadis had good flooring.

Of the 50 Anganwadis, only 25 were located in hygienic surroundings, the rest had in their vicinity uncovered drains, garbage heaps and slush. Forty six Anganwadis were located away from busy roads.

Equipment

The equipment available in the selected Anganwadis are depicted in Table I.

TABLE I AVAILABILITY OF EQUIPMENT IN THE ANGANWADIS

Equipment	Number of Anganwadis (n = 50)
Equipment for general use	
Registers and records	45
Health cards and growth charts	47
First aid box	30
Small mats	35
Cupboard (for storage)	3
Kitchen equipment	
Tumblers and plates	35
Vessels with lids for cooking	44
Bathroom equipment	
Vessels for storing water	47
Mugs	35
Brooms, brushes and other cleaning materials	21
Indoor play equipment	
Building blocks	15
Counting frames	15
Paints, paint brushes, coloured chalk sticks	11
Balls	7
Visual aids	
Black board	41
Picture book	35
Charts	33
Posters	30
Photographs	32
Flip book	31
Models	30
Puppets	31
Flannel graph	28

The AWWs of 45 Anganwadis maintained all the registers and records, health cards and growth cards perfectly. Thirty five Anganwadis had mats for children to sleep on. Only three Anganwadis had cupboards for storage of the equipment. Forty two Anganwadis had enough tumblers and plates for children to eat from. Forty four Anganwadis had vessels with lids for cooking. Forty seven Anganwadis had vessels for storing water, while 21 centres had brooms, brushes and other cleaning materials. Fifteen Anganwadis had indoor play equipment like building blocks.

Visual aids like blackboards were available in 41 Anganwadis. Other aids like charts, posters, photographs, flip book, models and picture books were available in the selected Anganwadis.

Other amenities

Storage

Thirty five AWWs expressed adequacy of space for storing provisions. Since the rest of the centres were merged due to lack of space, it was difficult for the workers to ensure the safety of the provisions stored.

Water and Sanitation

Thirty nine Anganwadis had drinking water available at their premises. The remaining (11) received water from nearby schools. Clean and closed containers were used in 36 Anganwadis for storage of water. Only two Anganwadis had toilet facilities. This was the biggest missing link in the programme.

Kitchen garden

Only four Anganwadis had kitchen gardens with papaya and drumstick trees. The reasons for the rest of the Anganwadis for not having kitchen gardens were inadequate space for gardening, water supply and lack of fencing.

b. Delivery of services

It is the impact of the services delivered, which would decide the outcomes of any programme and identify the lacunae, if any. Hence, a situational analysis of the various services delivered in the Anganwadis was carried out and presented below :

i. Non-formal pre-school education

Non-formal pre-school education is an important component of the ICDS programme. It is essential for the allround development of the child, i.e., physical, motor, psychological and social and the development of language and intelligence (NIPCCD, 1987).

Enrolment of children in pre-schools

The enrolment of children (between 2-6 years) and their attendance in the selected Anganwadis on the day of the survey are as depicted in Table II.

TABLE II ENROLMENT AND ATTENDANCE OF PRE-SCHOOL CHILDREN

(2 - 6 YEARS)

Particulars	Percentage of children (n:2966)
Enrolment	67.5* (2000)
Attendance	55.5** (1112)

n Number of children in the areas to be covered by the Anganwadis

* Calculated against total number

** Calculated against enrolment

Figures in parantheses indicate the actual numbers

It was a matter of concern that only 67.5 per cent of the children in the areas were enrolled in the Anganwadis under study. However on the day of the survey, it was found that only 55.5 per cent of the Anganwadi children enrolled had attended the pre-school pointing out the need to monitor the regularity of the children.

Programme schedule for pre-school education

A common programme is chalked out by the District Cell of the ICDS for all the Anganwadis as illustrated in Table III. The programme schedule in the Anganwadis included prayer, informal talk, stories, songs, exercises, science experience, language education, games, dramatisation, role play, creative activities and recollection of all the activities. Weekly programmes emphasising different themes like flowers, vegetables, animals, birds, transports and national leaders were followed by the AWWs while conducting pre-school activities. When the children were engaged in free play in the afternoons, the AWWs are supposed to make house visits to meet the mothers, to disseminate health and nutrition messages.

TABLE III PROGRAMME SCHEDULE FOR PRE-SCHOOL EDUCATION

Days	10.00 to 10.15 am	10.15 to 10.45 am	10.45 to 11.00 am	11.00 to 11.10 am	11.10 to 11.30 am	11.30 to 11.45 am	11.45 to 12.00 Noon	12.00 to 2.00 pm	2.00 to 4.00 pm
Monday	Prayer Informal talk	Story telling	Organised games	Interval	Language education	Exercise	Number activities	Supplementary feeding, rest and relaxation	Free play
Tuesday	Prayer Informal talk	Action songs	Exercise	Interval	Number activities	Story telling	Dos and Donts for daily life	"	Number activities & outdoor games
Wednesday	Prayer Informal talk	Story telling	Science Experience	Interval	Language education	Songs	Creative activities	"	Puppet show
Thursday	Prayer Informal talk	Songs	Exercise	Interval	Number activities	Science Experience	Story telling	"	Free play
Friday	Prayer Informal talk	Songs	Organised games	Interval	Number activities	Creative activities	Story telling	"	Meeting the mothers
Saturday	Prayer Informal talk	Recollection of all activities	Songs and story recollection	Interval	Recollection of all activities	Recollection of sense activity & Science Experience	Recollection of all activities	"	Free indoor play

ii. Supplementary nutrition

Supplementary nutrition means identifying the deficiencies and fulfilling the requirements of calories, proteins, minerals and vitamins in the existing diets, avoiding cutbacks in the family diet and taking other measures for nutrition rehabilitation (ICDS, 1990). Hence, supplementary nutrition is an important component of the ICDS programme aimed at improving the nutritional and health status of the beneficiaries, ultimately resulting in their overall development. The number of beneficiaries receiving supplementary nutrition is depicted in Table IV.

TABLE IV BENEFICIARIES RECEIVING SUPPLEMENTARY NUTRITION

Beneficiaries	Total number	Percentage of Beneficiaries (n : 50)		
		Enrolled	Attending pre -school	Receiving supplementary nutrition
Children				
a. 6 months to 2 years	1030	69 (712)	NA	46.6 (332)
b. 2 years to 6 years	2966	67.5 (2000)	55.6* (1112)	90.3** (1004)
Expectant women	708	88.7 (628)	NA	36.8 (231)
Nursing mothers	687	75.6 (519)	NA	43.4 (225)

* Calculated against enrolment

** Calculated against attendance

On the day of the survey, only 46.6 per cent of the children (6months to 2 years) enrolled were receiving supplementary nutrition in the selected Anganwadis. Also the percentage of children (2-6 years) receiving supplementary nutrition in selected Anganwadis was much lower than the children attending the pre-school. Over 100 children did not attend the Anganwadis even upto lunch time.

Thirty six per cent of the expectant women alone were receiving supplementary nutrition which was less when compared to those of the nursing mothers (43 per cent).

iii. Immunization coverage among beneficiaries

Mere receipt of supplementary nutrition alone can not raise the nutritional

and health status of the beneficiaries. They have to be protected against various infections, diseases, etc., which in turn would help in the maximum utilisation of the nutrients received.

Right from birth, children are exposed to various health hazards including communicable diseases. ICDS Programme provides the beneficiaries immunization against tuberculosis, diphtheria, pertusis, tetanus, measles and polio for all children under one year and against tetanus to all the expectant mothers (NIPCCD, 1987).

Table V indicates the coverage of children below six years under the immunization programme.

**TABLE V IMMUNIZATION COVERAGE OF CHILDREN
(0-6 YEARS)**

Particulars	Percentage of children (n : 4108)
Children	
Bacillus Calmette Guerin (BCG)	51.3 (2104)
Diphtheria, Pertusis, tetanus (DPT)	56.1 (2304)
Oral polio vaccine (OPV)	50.3 (2064)
Diphtheria, Tetanus (DT)	35.6 (1463)
Measles	26.6 (1093)

The number of children receiving BCG, DPT and OPV was higher than the children receiving DT and measles. In the case of expectant women, 53 per cent were receiving TT in the selected Anganwadis.

iv. Nutritional status of the children

Growth monitoring as an integral aspect of ICDS, helps in the identification of the grades of malnutrition among the children and diagnosis of the 'at risk' cases to be treated with priority.

Table VI gives the grades of malnutrition as revealed from the growth monitoring records, maintained in the Anganwadis.

**TABLE VI NUTRITIONAL STATUS OF THE CHILDREN
(0-6 YEARS)**

Details	Percentage of children (n : 4108)
Normal	54.0 (2219)
Malnutrition Grade I	21.0 (860)
Grade II	9.2 (382)
Grade III	9.3 (383)
Grade IV	6.5 (264)

Among the total children, 54 per cent alone were normal, and 21 per cent in Grade I malnutrition, 9.2 per cent in Grade II, 9.3 per cent in Grade III and 6.5 per cent in Grade IV malnutrition.

v. 'At risk' cases identified and referred

The purpose of referral services is to provide medical care of an appropriate standard according to the seriousness of the disease as well as follow-up care of cases that have been treated or given medical attention (NIPCCD, 1987)

The details of "at risk" cases identified and referred are shown in Table VII.

TABLE VII "AT RISK" CASES IDENTIFIED AND REFERRED

"At risk" cases	Percentage of children (n : 4108)
Identified	5.9 (243)
Referred	60.4* (146)

* Percentage calculated against number identified

It was disheartening to note that in the selected Anganwadis all the children identified as "at risk" were not referred to the hospitals immediately.

vi. Health and Nutrition Education (HNE)

The health and nutrition education component of the ICDS aims at effective communication of certain basic health and nutrition messages with a view to enhancing the mother's awareness of the child's needs and her capacity to look after these within the family environment. Nutrition and health education is required to be given to all women in the age group of 15-44 years and other members of the family (NIPCCD, 1987).

Eighteen Anganwadis conducted HNE programme and on an average 50 per cent of the women were reported to be attending the programmes.

vii. Community participation

The participation of the community in the Anganwadi activities was found to be meagre; further there were no proper records to indicate the specific ways in which the community participated in the ICDS. Therefore the exact data on this aspect could not be collected except from casual interviews with the AWWs which appeared to be rather biased views.

B. Improving the delivery of services through the Anganwadis

This aspect of the study consisted of the following steps :

1. Arranging for the intervention of NSS and
2. Capacity building of the Anganwadi workers

1. Arranging for the intervention of NSS

Avinashilingam University had incorporated extension in the curriculum at the Under Graduate (UG) and Post Graduate (PG) levels. The National Service Scheme (NSS) has been the avenue for extension at the UG level.

The NSS advisory committee of the University resolved that the focal thrust for the NSS work of the II and III year UG students would be the Anganwadis of the ICDS in Coimbatore Corporation areas. Accordingly the regular activities, special camp activities and other special activities of the NSS would be directed towards the Anganwadis. This decision by the University was capitalised by the investigator to link NSS for the improvement of the delivery of services through the Anganwadis. At the request of the investigator 25 of the 50 Anganwadis surveyed were adopted by the NSS of the University. The 25 Anganwadis to be adopted by the NSS were purposively selected. Care was taken to ensure that the 25 Anganwadis were those which required special attention in terms of enrolment, attendance of the beneficiaries and delivery of services. The NSS programme officers (faculty) and the students were oriented on the need for improving the different services of the ICDS programme through the Anganwadis and the activities the NSS could be taken up to meet these needs.

The specific activities the NSS volunteers were involved in, were the following :

a. Regular activities

The regular activities carried out in the Anganwadis are listed below :

Non -formal pre-school education

- Preparation of teaching aids such as charts, models, toys etc.,
- Organising coaching classes for Anganwadi children
- Teaching English alphabets and rhymes
- Collecting and distributing low cost toys
- Strengthening the enrolment
- Conducting competitions, dance, songs, recitation and telling stories
- Field trips for Anganwadi children
- Organising cultural programme
- Starting a children's library

Supplementary nutrition

- Noon meal supervision
- Assisting helper in cutting the vegetables
- Helping children in cleaning hands before eating meals
- Teaching proper eating habits and behavioural aspects for children

Health, hygiene and immunization

- Helping children to be neat and tidy (nail cutting, bathing, combing, etc.,)
- Arranging safe drinking water
- Organising immunization programme for children and the community
- Ensuring the maintenance of growth monitoring charts

Health and Nutrition Education

- Health and Nutrition education for AWWs and mothers
- Demonstration of a low cost nutritious food

Amenities and facilities at the centre

- Construction of low cost toilets and fencing with the help of the community
- Providing uniforms and shoes for the children with the help of donors
- Developing kitchen garden
- Collection and distribution of old and new clothes
- Repairing floors of Anganwadis

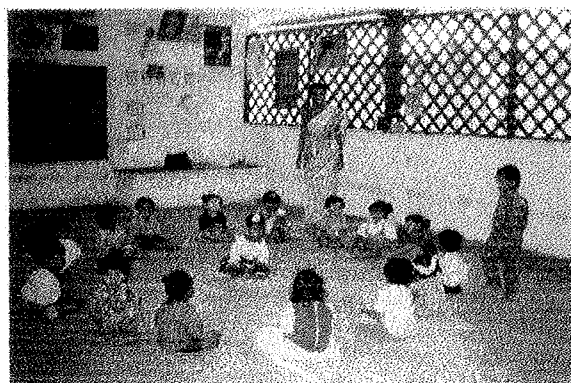
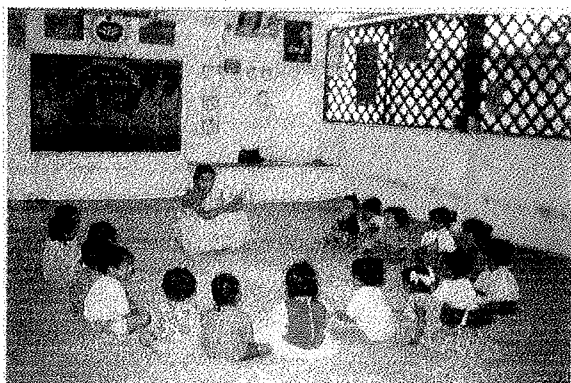
Activities for Eliciting Community Participation

- Celebration of National days and festivals
- Organising women's clubs and youth clubs
- Arranging for free legal aid, book bank and mobile library
- Screening documentary films on education, social issues and cultural heritage
- Teaching handicrafts
- "Value Awareness" programme for youth
- Consumer protection programme

The regular activities, the NSS volunteers undertook pertained directly and indirectly with all the services of the ICDS Programme, namely pre-school education, nutrition and health improvement, sanitation and hygiene, tapping resources in terms of men, material and money and also towards communal harmony and national integration (PLATE 1).

b. Special Camp Activities

From 1991-1995, the NSS special camps were conducted in the slums



CONDUCTING PRE-SCHOOL ACTIVITIES



NOON MEAL SUPERVISION

BENEFICIARIES RECEIVING SUPPLEMENTARY NUTRITION



ORGANISING IMMUNIZATION PROGRAMME FOR CHILDREN AND THE COMMUNITY

**PLATE 1
REGULAR ACTIVITIES CONDUCTED BY THE NSS VOLUNTEERS**

where Anganwadis were located. The themes of the special camps were,

1991 - 92 Youth for Upliftment of Anganwadis

1992 - 93 Mass Literacy Programme

1993 - 94 Youth for National Integration and Social Harmony

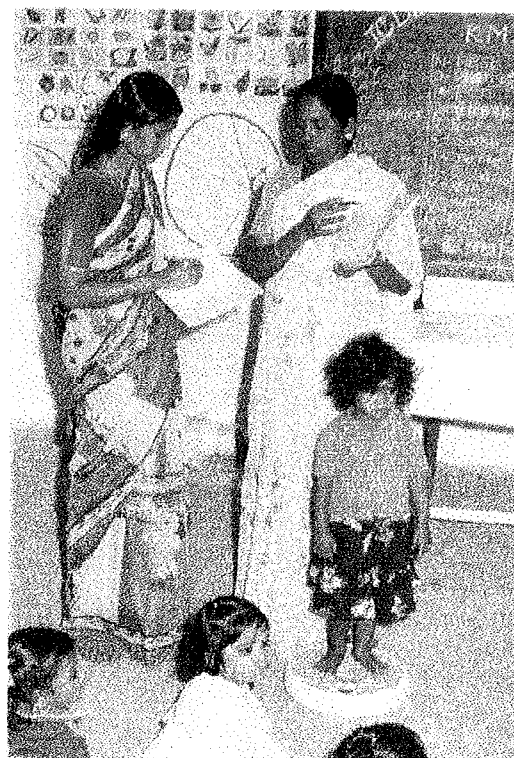
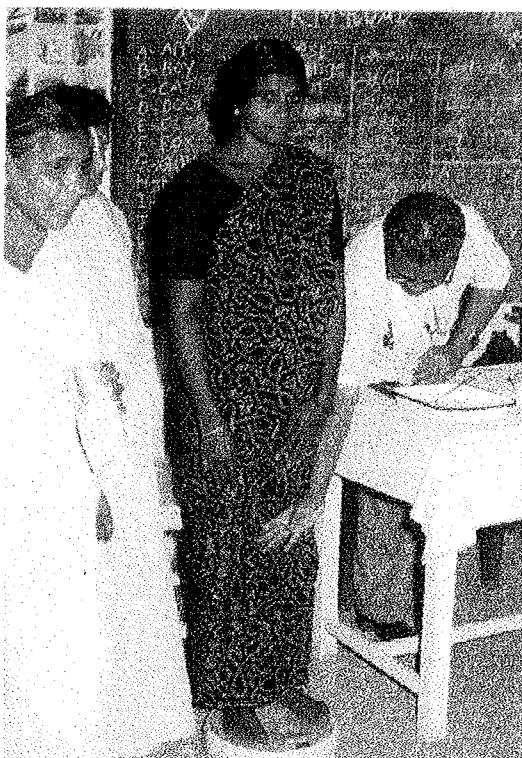
1994 - 95 Youth for National Integration

Based on the theme of the year, special camp activities were planned for 10 days and the important activities carried out in the Anganwadis are enlisted hereunder :

- White washing and repairing Anganwadi centres
- Painting the blackboard
- Medical camps
- Demonstration of nutritious recipes
- Cleanliness drive
- Kitchen gardening and tree plantation

The special camp activities included mainly face-lifting activities such as white washing the Anganwadis, environmental sanitation, medical camp, tree plantation and demonstration of nutritious recipes. These activities were found to be centred around fulfilling the long term needs of the Anganwadis and the community which established rapport, strengthened interaction with the community and promoted community participation (PLATE 2).

The other special activities of NSS such as celebration of national days, blood donation drive, environmental upgradation etc also indirectly helped to strengthen the programme inputs of the Anganwadis.



MEDICAL CAMPS



**DEMONSTRATION OF
NUTRITIOUS RECIPES**



**INCOME GENERATING
ACTIVITIES**

**PLATE 2
SPECIAL CAMP ACTIVITIES**

2. Capacity building of the Anganwadi Workers

Although NSS intervention was envisaged to be a means to improve the delivery of services, capacity building of the AWW was found to be inevitable, she being the central force for the success of the ICDS programme. No doubt the AWWs receive training given by the ICDS officials. However, they needed special training to enable them to deliver the services through Anganwadis effectively. In order to plan the training module for the AWWs, a workshop was convened with the participation of NSS programme officers (25), NSS student representatives (25), mothers of Anganwadi children (25), community representatives (25) and AWWs (25).

The workshop in their deliberation drew out the following strategies for action:

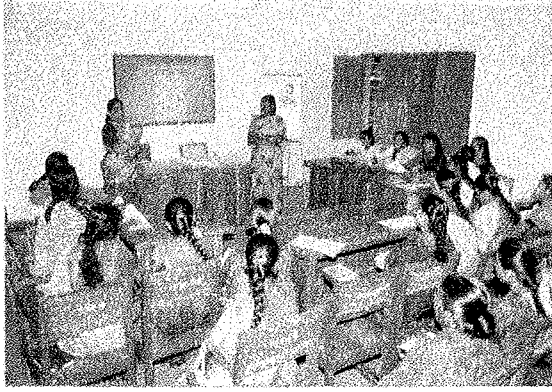
1. Organising inservice training programme to AWWs on pre-school education, nutrition and health education and community participation
2. Initiating steps for increasing the enrolment of children
3. Availing the amenities needed
4. Motivating mothers to participate more effectively in the Anganwadi programme.
5. Improving the environmental sanitation of the Anganwadi centre
6. Organising Mahila Mandals (Women's Clubs)
7. Mobilising support from local leaders

With the permission of the ICDS officials, a 15 day training programme was organised during the afternoons enabling the Anganwadi workers to attend their normal routine in the morning sessions and the training in the afternoons. The detailed training module is given in Appendix V. The daily sessions consisted of four hour capsules.

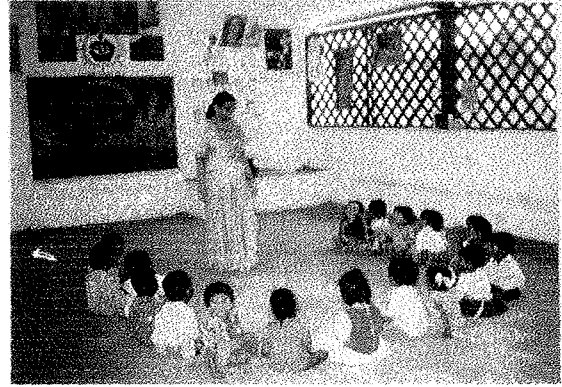
The programme included lecture-cum-group discussion on leadership development, importance of strengthening Anganwadi programme, nutrition for children, hygiene while cooking, water-borne diseases, environmental education, first aid, immunization for children, techniques of motivating the community in Anganwadi activities, importance of play and early detection of disabilities.

Demonstrations were conducted on preparation of low cost materials for pre-schoolers, indoor and outdoor games, aids for story telling, soak pit, compost pit and kitchen garden. Nursery rhymes in English and Tamil were also taught (as per the desires of the parents). Care of children with skin problems and remedies for the problems were emphasised (PLATE 3).

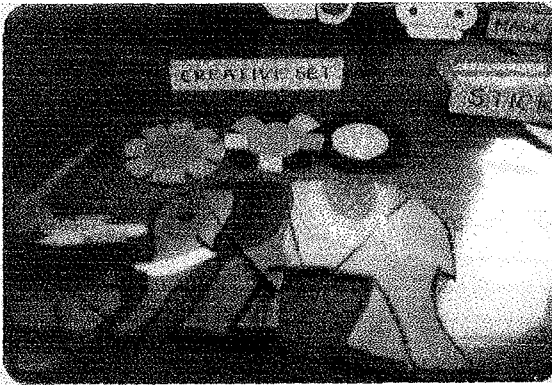
Anganwadi workers were also taught about the operation of slide projector. Preparation of detergent and cleaning powders was also demonstrated. Low cost toys from indigenous and low cost materials were prepared. Different teaching methods such as lecture with small group task and individual task, demonstration, practicing concepts with games and songs, films and slide shows, nature walk, use of the teaching techniques such as role play, case study and puppet shows were included in the training. Opportunities for practice teaching, preparation of leaflets and pamphlets, making teaching aids and other low cost materials were provided. All the prepared materials were given to the participants for use in their Anganwadis.



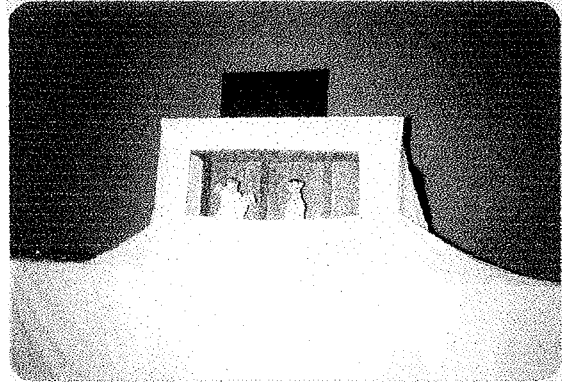
LECTURE - CUM - DISCUSSION ON IMPORTANCE OF NUTRITION FOR CHILDREN



DEMONSTRATION ON TEACHING NURSERY RHYMES TO ANGANWADI CHILDREN



LOW COST TOYS AND PUPPETS PREPARED BY THE AWWs DURING TRAINING



DEMONSTRATION OF CANDLE MAKING TO AWWs

**PLATE 3
CAPACITY BUILDING OF THE ANGANWADI WORKERS**

C. Assessing the impact of the efforts putforth by the NSS

The impact of the efforts made by the NSS was assessed in terms of the following :

1. Details of contribution of NSS in the Anganwadis
2. Outcomes of NSS intervention on the delivery of services in the Anganwadis and
3. Performance of AWWs as influenced by the capacity building efforts

1. Details of contribution of NSS in the Anganwadis

The details of contribution of NSS in the Anganwadis were elicited from the following :

1. NSS Volunteers
2. NSS Programme Officers
3. Mothers of Anganwadi children
4. Community representatives and
5. Anganwadi workers

The details were collected from representative samples of all the above categories as depicted in Table VIII.

TABLE VIII DISTRIBUTION OF THE SAMPLE

No.of sample selected					
Anganwadis selected	NSS volunteers	NSS programme officers	Mothers of Anganwadi children	Community representatives	AWWs
25	250	25	250	250	25

A questionnaire was constructed to study the details of the involvement of the NSS volunteers in the 25 adopted Anganwadis (Appendix VI). The details were collected from 250 volunteers randomly selected.

The programme officers are the pillars of the NSS programme who have an indirect effect on the success of the programme. As such the opinions of the programme officers regarding the contribution of NSS towards the delivery of services in ICDS were collected through a questionnaire (Appendix VII). These details were collected from all the 25 programme officers in charge of the 25 Anganwadis selected.

Involvement of the NSS in the Anganwadi programme helps in the overall development of the children. But awareness of the programme, its implementation and its pros and cons cannot be expressed by the children. Hence these aspects were collected from the mothers of the children who could be more knowledgeable and expressive. They were collected in random from 250 mothers (10 per Anganwadi area) through an interview schedule developed (Appendix VIII).

The success of any programme is wholesome only when the beneficiaries are aware of its existence and functioning and take part in it directly or indirectly. Such details were collected from a random sample of 250 people in the community (10 per Anganwadi area) through an interview schedule (Appendix IX).

A questionnaire (Appendix X) was distributed to the AWWs also to elicit the contribution of NSS in the Anganwadis.

2. Outcomes of NSS intervention on the delivery of services in the Anganwadis.

The outcomes of NSS intervention on the delivery of services in the Anganwadis were studied as under:

1. Participation of children in non - formal pre - school education
2. Participation in the supplementary nutrition programme
3. Immunization coverage and health checkup on the beneficiaries
4. Status of nutrition and health education and
5. Involvement of the community in the Anganwadi programme

The questionnaire administered to the AWWs before intervention of NSS was used after intervention also. This data recorded in the Anganwadis adopted by NSS was compared with that of Anganwadis not adopted (control) and these were the source of data for assessing the out comes of the efforts putforth.

3. Performance of AWWs as influenced by the capacity building efforts

The performance of AWWs before training and after training was studied as under :

1. Performance of children in non - formal pre - school education
2. Teaching aids used by the AWWs
3. Pre - school activities organised by the AWWs
4. Performance of the beneficiaries receiving supplementary nutrition
5. Awareness about health checkup and immunization
6. Ways of eliciting community participation

A questionnaire (Appendix XI) was distributed to the AWWs to elicit the above information before and after training.

Chapter IV gives details of the findings of this action research.

RESULTS AND DISCUSSION

IV RESULTS AND DISCUSSION

The results of the study on " Strengthening the Delivery of Services of 'Integrated Child Development Services' (ICDS) through National Service Scheme (NSS) Intervention" are discussed under the following heads :

- A. Details of contribution of NSS in the Anganwadis
- B. Impact of the efforts of NSS intervention and
- C. Performance of AWWs as influenced by the capacity building efforts.

A. Details of contribution of NSS in the Anganwadis

1. Non - formal pre-school education

The contribution of NSS towards the non-formal pre-school education in the Anganwadis is given in Table IX.

TABLE IX CONTRIBUTION OF NSS TOWARDS NON-FORMAL PRE-SCHOOL EDUCATION

Nature of Contribution	Percentage of Respondents*				
	Volunteers (n:250)	Programme Officers (n:25)	AWWs (n:25)	Mothers (n:250)	Community Representa- tives (n:250)
Teaching songs, stories, alphabets and numbers	100	100	100	90	84
Improving the educational performance of children	100	92	100	92	63
Preparing and using visual aids	100	96	96	68	75
Improving and regularising the attendance of children	100	72	84	74	61
Creating interest among the children in learning new concepts	96	92	88	68	65
Providing science experiences	91	84	76	53	62
Conducting indoor and outdoor games	82	80	76	70	51
Preparing low cost toys for children	81	68	64	53	53

*Multiple Response

From the responses of the students, programme officers, AWWs, mothers and the representatives of the community, it is evident that involvement of NSS in the Anganwadi programmes had considerably contributed to the non-formal pre-school education component of ICDS. The specific contribution of all the volunteers included, direct teaching of songs, stories, alphabets and numerals during their weekly visits to Anganwadis, facilitating the AWWs by preparing visual aids on key concepts and enhancing the performance of pre-school children.

A special contribution by the NSS volunteers appeared to be strengthening the enrolment in the Anganwadis and improving the attendance of the children, thereby ensuring their regularity which is the basis for the success of the programme. This aspect was endorsed by over 70 per cent of the AWWs, programme officers and mothers and 60 per cent of the representatives of the community.

Another noteworthy contribution was stimulating children to learn new concepts through creative activities and dramatisation of stories and songs, as well as providing science experiences to the pre-schoolers. NSS volunteers also conducted indoor and outdoor games as expressed by the Programme Officers (80 per cent), AWWs (76 per cent), mothers (70 per cent) and community representatives (51 per cent). An equal number of mothers and representatives expressed that the NSS volunteers facilitated learning in the Anganwadis by preparing low cost toys for children.

a. Teaching methods and aids used

The NSS volunteers used a variety of teaching methods to communicate with the pre-school children. Along with informal talk and demonstration, audio visual aids as listed in Table X were used.

TABLE X TEACHING AIDS USED BY THE VOLUNTEERS

Teaching Aids	Percentage of * volunteers (n: 250)
Charts	92
Posters	90
Chalk board	89
Photographs	75
Flip charts	63
Exhibits and Models	52
Puppets	42
Flash cards	40

* Multiple Response

More than 75 per cent of the volunteers used chalk boards, charts, posters, and photographs while conducting pre-school activities in the Anganwadis. Flip charts, exhibits and models were used by over 50 per cent volunteers, while puppets and flash cards were used by a considerable 40 per cent volunteers. The volunteers appeared to have spent a lot of time in preparing appropriate teaching aids for the Anganwadis.

b. Play equipment

Ninety six per cent of the volunteers prepared and used low cost toys as play equipment. The equipment included rattlers (75 per cent), musical instruments (72 per cent), puzzles (61 per cent), wooden frames (60 per cent) and blocks (59 per cent). The NSS volunteers individually and collectively mobilised all available resources for preparing the play equipment.

2. Supplementary Nutrition

It is an important component of ICDS benefitting both the children and mothers and through them the community at large. The different roles played by the volunteers in offering supplementary nutrition are presented in Table XI.

TABLE XI ROLE OF VOLUNTEERS IN PROVIDING SUPPLEMENTARY NUTRITION

Activities	Percentage of Respondents*				
	Volunteers (n:250)	Programme Officers (n:25)	AWWs (n:25)	Mothers (n:250)	Community Representa- tives (n:250)
Supervising noon meal Programme	100	100	92	76	71
Meeting mothers and educating them on good nutrition	100	100	96	90	86
Creating a sense of nutrition awareness among the beneficiaries	88	84	84	74	70
Promoting better food habits among children	86	80	80	72	72
Serving food to children	84	80	72	74	70
Helping children eat vegetables without wasting	80	80	76	64	64
Assisting in food preparation	72	68	76	65	59
Helping in distributing Sathumavu** to children between 6 months and 2 years in the Anganwadis	68	68	56	56	48
Helping in distributing Sathumavu to expectant and nursing mothers in the Anganwadis	61	56	56	64	50

Contd.....

Demonstrating appropriate methods of cooking to Anganwadi helpers	54	52	48	46	33
Home delivery of Sathumavu to the beneficiaries' who are unable to come to Anganwadis	49	40	40	36	36

* Multiple Response

** "Sathumavu " is a nutritious mix and is a combination of low cost locally available cereals, pulses, jaggery and soyaflour. Under the ICDS programme a child (6 months to 2 years) is fed with 80 gms of this mix and a pregnant or lactating woman receives 120 gms everyday. The mix is centrally prepared and supplied to the Anganwadis for distribution to the beneficiaries.

On the day of the visits, all the volunteers helped in supervising noon meal programme in the Anganwadis. Volunteers also educated the mothers on the nutritional status of the pre-school children through frequent house visits, meetings with the mothers and demonstrations.

Over 60 per cent of the volunteers, programme officers, AWWs, mothers and the representatives of the community pointed out that the NSS volunteers were creating a sense of nutrition awareness among the beneficiaries, promoting better food habits among children like washing hands before meals and eating vegetables and greens served without wasting. Over 70 per cent of the respondents stated that the volunteers were helping the workers and helpers in serving food to children.

It was interesting to note that a considerable proportion of the respondents mentioned about the contribution of the NSS in the actual meal preparation in the Anganwadis and in the distribution of the ready to eat "Sathumavu" to the children (6 months to 2 years) as well as expectant and nursing mothers, in the centres and in their homes, whenever the beneficiaries could not come to the centres.

3. Health checkup and Immunization

The activities carried out by the volunteers in relation to health checkup and immunization are listed in Table XII.

TABLE XII ACTIVITIES CARRIED OUT BY THE VOLUNTEERS IN RELATION TO HEALTH CHECKUP AND IMMUNIZATION PROGRAMME

Activities	Percentage of Respondents*				
	Volunteers (n:250)	Programme Officers (n:25)	AWWs (n:25)	Mothers (n:250)	Community Representa- tives (n:250)
Bringing children to the immunization camp.	96	88	88	75	69
Distributing vitamin tablets and syrup to children	89	92	80	74	69
Organising					
a. Pulse Polio immunization drive	83	80	84	80	79
b. Dental Checkup	79	72	68	70	68
c. Eye Camp	71	72	76	80	71
Distributing iron and folic acid to expectant women	81	76	64	58	61
Helping AWW in taking weight for children and pregnant women	73	64	72	74	65
Referring "at-risk" cases to hospitals	65	60	52	61	43

* Multiple Response

The contribution of the NSS volunteers towards health checkup and immunization was mainly a facilitating function by way of assisting the medical team during the routine health checkup camps and in the follow up measures i.e., ensuring referral services. Their role in the Anganwadis pertained mainly to assisting the AWWs in taking anthropometric measurements of the beneficiaries. As a corollary the awareness of the community about the involvement of the NSS in this ICDS component was also limited.

4. Health and Nutrition Education

Table XIII depicts the contribution of NSS towards health and nutrition education, a significant service to be delivered by the ICDS programme.

TABLE XIII CONTRIBUTION OF NSS IN HEALTH AND NUTRITION EDUCATION PROGRAMME

Activities	Percentage of Respondents*				
	Volunteers (n:250)	Programme Officers (n:25)	AWWs (n:25)	Mothers (n:250)	Community Representa- tives (n:250)
Creating awareness on					
a. the importance of immunization to children and expectant women	100	100	100	100	96
b. Environmental sanitation	100	100	96	82	80
c. First aid and home nursing and	82	80	76	66	61
d. Nutritional deficiency diseases	73	72	80	80	73
Imparting Health and Nutrition Education through house visits	100	100	92	86	89
Persuading mothers to take part in HNE programmes by the AWWs.	100	92	100	84	80
Organising follow-up programmes on					
a. Family planning	92	88	92	75	68
b. Demonstration of low cost nutritious recipes	90	100	92	89	82
c. Balanced diet	90	84	96	88	71
d. Communicable diseases and prevention	90	84	92	93	64
e. Common ailments for children and remedial measures	89	80	68	60	63
f. First aid and home nursing	82	72	68	60	51
g. Nutrition and its importance	71	88	92	73	64
h. Immunization	71	68	72	64	53
i. Environmental sanitation	70	68	72	60	62
j. Importance of breast feeding	72	60	76	51	42
k. Child care	61	72	68	55	56
Cleanliness drive in and around the Anganwadi	57	68	76	63	65
Helping children to be neat and tidy (nail cutting, combing, bathing etc.,)	52	64	60	48	36
Arranging for safe drinking water	50	40	36	30	36

* Multiple Response

All the AWWs agreed that the NSS volunteers were persuading mothers to take part in HNE programmes by the AWWs.

It is interesting to note that 90 per cent of the respondents were satisfied with the services of NSS in the Anganwadis specially in the arena of Health and Nutrition Education. The volunteers were found to be extending their helping hands in organising programmes like demonstration on low cost nutritious recipes, conducting meetings on family planning, balanced diet, first aid and home nursing, immunization, environmental sanitation, importance of breast feeding and childcare.

Mothers had better knowledge than AWWs and community representatives on the involvement of NSS volunteers. They opined that the volunteers explained clearly about the causes of communicable diseases and methods of preventing them, through mothers' meetings. The NSS volunteers also rendered their help in cleaning the Anganwadi, making children to be neat and tidy and sometimes they were arranging drinking water also, as pointed out by the mothers and representatives of the community.

5. Community Participation

The contribution of NSS towards community participation in ICDS is shown in Table XIV.

TABLE XIV CONTRIBUTION OF NSS TO COMMUNITY PARTICIPATION IN ICDS

Activities	Percentage of Respondents*				
	Volunteers (n:250)	Programme Officers (n:25)	AWWs (n:25)	Mothers (n:250)	Community Representa- tives (n:250)
Creating awareness about the programme in the community	100	100	100	74	61
Celebrating National days and festivals	100	100	100	96	98
Identifying the needs and problems of the people in the community	96	88	76	63	89
Collecting dress materials from the public for distribution to children	92	92	88	90	92
Involving the community in white washing, fencing and tree planting	91	84	80	65	83
Organising Women's Clubs	89	84	76	64	53
Getting help from the community to repair the Anganwadi centres and construct toilets	84	80	76	64	77
Conducting healthy baby contests	81	80	76	89	65
Entrusting local leaders and school teachers to participate in the ICDS programme	80	76	80	61	71

* Multiple Response

It is clear from the above table that through NSS, the community had understood the objectives of ICDS and its services. The AWWs specifically acknowledged the services of the NSS volunteers in creating awareness about the programme among the beneficiaries. Majority of the respondents (90 per cent) stated that the volunteers were regularly celebrating the national festivals and making the community participate in these festivals.

The representatives of the community had better knowledge than AWWs and mothers regarding the participation of NSS in Anganwadis especially in collecting dress materials from the public for distributing to children and making the community participate in the maintenance and upkeep of the centres.

B. Impact of the efforts of NSS Intervention

The impact of the efforts during and after NSS intervention is discussed here under;

1. Non - formal pre-school education

Table XV depicts the impact of NSS intervention in improving the enrolment and attendance of the pre-schoolers in the Anganwadis.

TABLE XV CHILDREN RECEIVING PRE-SCHOOL EDUCATION

Particulars	ANGANWADIS ADOPTED BY NSS					CONTROL
	Percentage of children			"P" value		Percentage of children (n:1471)
	BI (n:1510)	MI (n:1498)	AI (n:1477)	BI Vs MI	MI Vs AI	
+Enrolment	66.2 (1000)	70.1 (1050)	86.6 (1279)	2.167**	11.026*	72.1 (1060)
@Attendance	55.0 (550)	66.6 (699)	78.3 (1001)	5.367*	6.324*	61.9 (656)

n : Total No. of children in the areas covered by the 25 Anganwadis adopted.

* Significant at 1 per cent level

** Significant at 5 per cent level

+ Percentage calculated against total number of children in the areas

@ Percentage calculated against enrolment

Note : The explanation given for the above symbols is applicable for Tables XVI, XVII, XVIII, XIX, XX and XXI.

Figures in parentheses denote actual number of children.

BI : Before Intervention

MI : Mid Intervention

AI : After intervention

During the four year period of the study there has been a decline in the number of pre-schoolers in the areas covered by the 25 Anganwadis under reference. This may be due to the increasing adoption of small family norm by the families, thanks to the efforts of Governmental and non Governmental agencies. The vertical mobility of the older pre-schoolers into the school going age may also be attributed to be a cause for this decline. A steady increase in the percentage enrolment as well as attendance of the pre-schoolers in the Anganwadis (adopted) was observed which is found to be significant at 1% level.

A comparison between the children receiving pre-school education in the Anganwadis adopted by NSS and the control reveals that the percentage enrolment and attendance of the children (2-6 years) was higher in the Anganwadis adopted than in the control. That the NSS intervention has helped in improving the enrolment of pre-schoolers in the area by 20.4 per cent (86.6 - 66.2) and attendance by 23.3 per cent (78.3 - 55.0) is very encouraging. This was due to house visits, parents' meeting, enrolment drive and interesting teaching materials used by the student volunteers during their Anganwadi visits and by the trained Anganwadi workers.

2. Supplementary Nutrition

The supplementary nutrition given to the beneficiaries may be another factor to increase the enrolment of the children the Anganwadis, specially for those between 2-6 years of age. Table XVI portrays the impact of the NSS intervention on the number of beneficiaries for supplementary nutrition (2-6 years) in the Anganwadis under study.

TABLE XVI CHILDREN (2-6 YEARS) RECEIVING SUPPLEMENTARY NUTRITION

Particulars	ANGANWADIS ADOPTED BY NSS					CONTROL
	Percentage of children			"P" value		Percentage of children
	BI (n:1510)	MI (n:1498)	AI (n:1477)	BI Vs MI	MI Vs AI	(n:1471)
Enrolment	66.2 (1000)	70.1 (1050)	86.6 (1279)			72.1 (1060)
Attendance	55.0 (550)	66.6 (699)	78.3 (1001)			61.9 (656)
#Received	89.5 (492)	90.7 (634)	98.6 (987)	0.734	7.614*	87.0 (571)

Percentage calculated against attendance

It was very encouraging that the percentage of recipients of supplementary nutrition registered an increase due to the NSS intervention, from 89.5 per cent to 98.6 per cent of those attending the Anganwadis. However, the percentage had not reached the optimum level. The reason may be that at the time of diarrhoea and other illness, the mothers were not allowing their children to take the food from the Anganwadis. They come to the centre and feed their children with special diets such as barley kanji, rice kanji etc. (Kanji is porridge made of cereals and is consumed during illness).

On comparison, it was found that the percentage of recipients of supplementary nutrition was lower in the control Anganwadis.

The impact of NSS intervention on the other beneficiaries receiving supplementary nutrition (children between 6 months and 2 years, expectant and nursing mothers) in the Anganwadis adopted was also studied and compared with the control and the results are given in Table XVII.

TABLE XVII IMPACT ON BENEFICIARIES RECEIVING SUPPLEMENTARY NUTRITION

Particulars	Percentage of Beneficiaries											
	6 months - 2 years ADOPTED			CONTROL	Expectant women ADOPTED			CONTROL	Nursing mothers ADOPTED			CONTROL (n:335)
	BI (n:512)	MI (n:506)	AI (n:462)	(n:456)	BI (n:512)	MI (n:506)	AI (n:462)	(n:330)	BI (n:512)	MI (n:506)	AI (n:462)	(n:335)
Enrolment	70.3 (360)	72.1 (365)	87.7 (405)	80.7 (368)	88.3 (310)	90.5 (315)	99.4 (341)	83.3 (275)	72.5 (250)	76.4 (262)	78.6 (265)	75.2 (252)
"P" value	0.642	5.982			0.840	5.334*			1.179	0.703		
Received	50.3 (181)	52.3 (191)	96.8 (392)	62.8 (231)	38.7 (120)	51.7 (163)	97.4 (332)	73.1 (201)	44.0 (110)	54.2 (142)	97.7 (259)	67.9 (171)
"P" value	0.552	14.366*			3.274*	13.564*			2.307**	11.716		

After the NSS intervention particularly through the motivation campaigns there was a tremendous improvement in the enrolment and in the proportion receiving supplementary nutrition in the case of children 6 months to 2 years (46.5 per cent), expectant women (58.7 per cent) and nursing mothers (53.7 per cent). The number of beneficiaries receiving supplementary nutrition in the Anganwadis adopted was higher than in the control. However, it is to be observed from the table that not all those who were enrolled received supplementary nutrition. Because the beneficiaries were still irregular in coming to the centres to receive the food supplements.

3. Health checkup and Immunization

The impact of NSS intervention on the immunization coverage of beneficiaries in the adopted Anganwadis was compared with that of the control and the results are presented in Table XVIII and Figure 4.

TABLE XVIII IMMUNIZATION COVERAGE ON BENEFICIARIES

Particulars	ANGANWADIS ADOPTED BY NSS					CONTROL
	Percentage of children			"P" value		Percentage of children
	BI (n:2025)	MI (n:2080)	AI (n:2349)	BI Vs MI	MI Vs AI	(n:2315)
Children						
Bacillus calmette Guerin (BCG)	52.0 (1052)	54.2 (1127)	89.4 (2101)	1.433*	26.343*	78.8 (1824)
Diphtheria Pertusis Tetanus (DPT)	54.6 (1106)	62.8 (1307)	90.3 (2120)	5.349*	21.763*	80.2 (1856)
Oral Polio Vaccine (OPV)	52.7 (1067)	65.3 (1359)	100.0 (2349)	8.239*	31.186*	91.7 (2122)
Diphtheria Tetanus (DT)	33.9 (682)	43.4 (902)	85.6 (2001)	6.374*	29.229*	60.3 (1396)
Measles	26.0 (526)	39.4 (819)	85.5 (2008)	9.145*	31.872*	60.5 (1401)
Expectant Women	(n:310)	(n:315)	(n:341)			(n:275)
Tetanus Toxoid	52.9 (164)	59.3 (187)	100.0 (341)	1.628	13.121*	69.1 (190)

At the end of the study it was found that in the adopted Anganwadis all the children were given OPV and all the expectant women were given tetanus toxoid injections. A marked increase was observed in the number of beneficiaries being immunized against other diseases too. Most of these improvements were also found to be statistically significant at 1 per cent level. The volunteers conducted a series of health campaigns in the adopted Anganwadis specially pulse polio immunization camps, through which they created awareness among the mothers about the importance of immunization to children. This was the main reason for the increase in the number of beneficiaries in the adopted Anganwadis. However a cent per cent coverage was not evinced in the adopted Anganwadis too. Further measures should be planned by NSS to bring about a hundred per cent immunization coverage of all the beneficiaries.

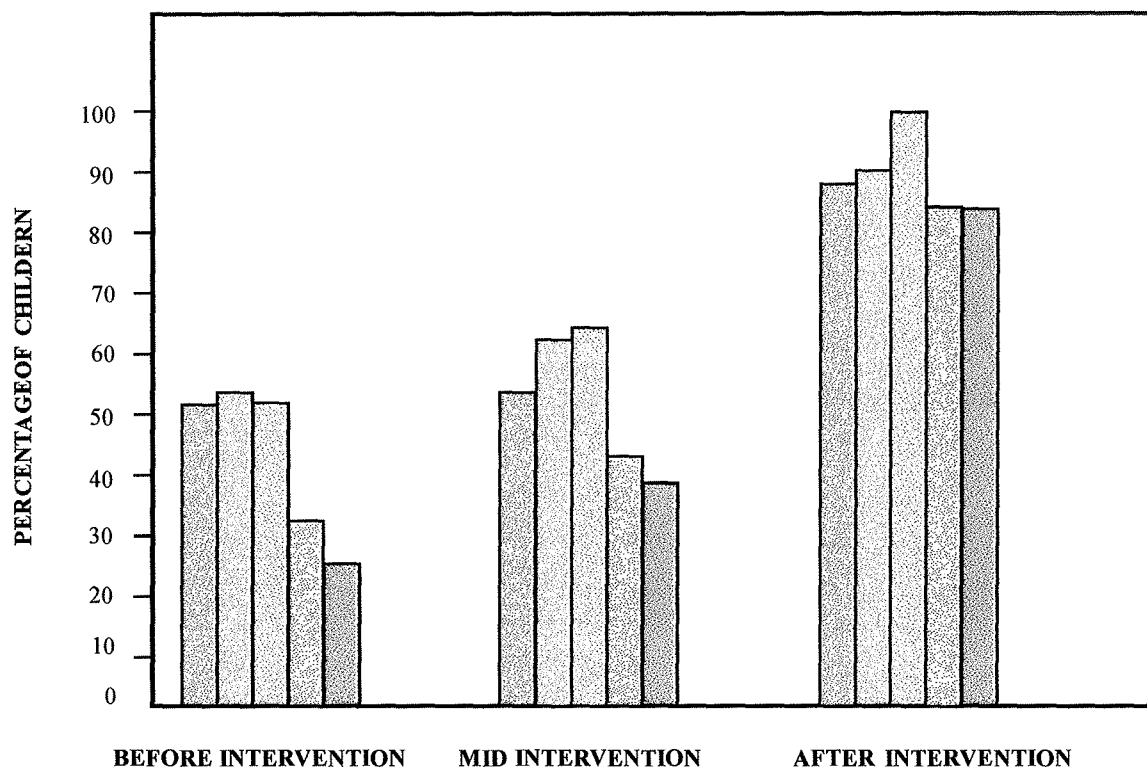


FIGURE 4
IMMUNIZATION COVERAGE ON BENEFICIARIES

KEY	
	BCG
	DPT
	OPV
	DT
	Measles

Nutritional Status of Children

Various integrated inputs of the ICDS programme with the NSS intervention get reflected in the nutritional status of the beneficiaries, specially of the children in the growing years. The impact of the efforts of NSS had helped to improve the nutritional status of the children in the adopted Anganwadis. This was compared with the control and the results are shown in Table XIX and Figure 5.

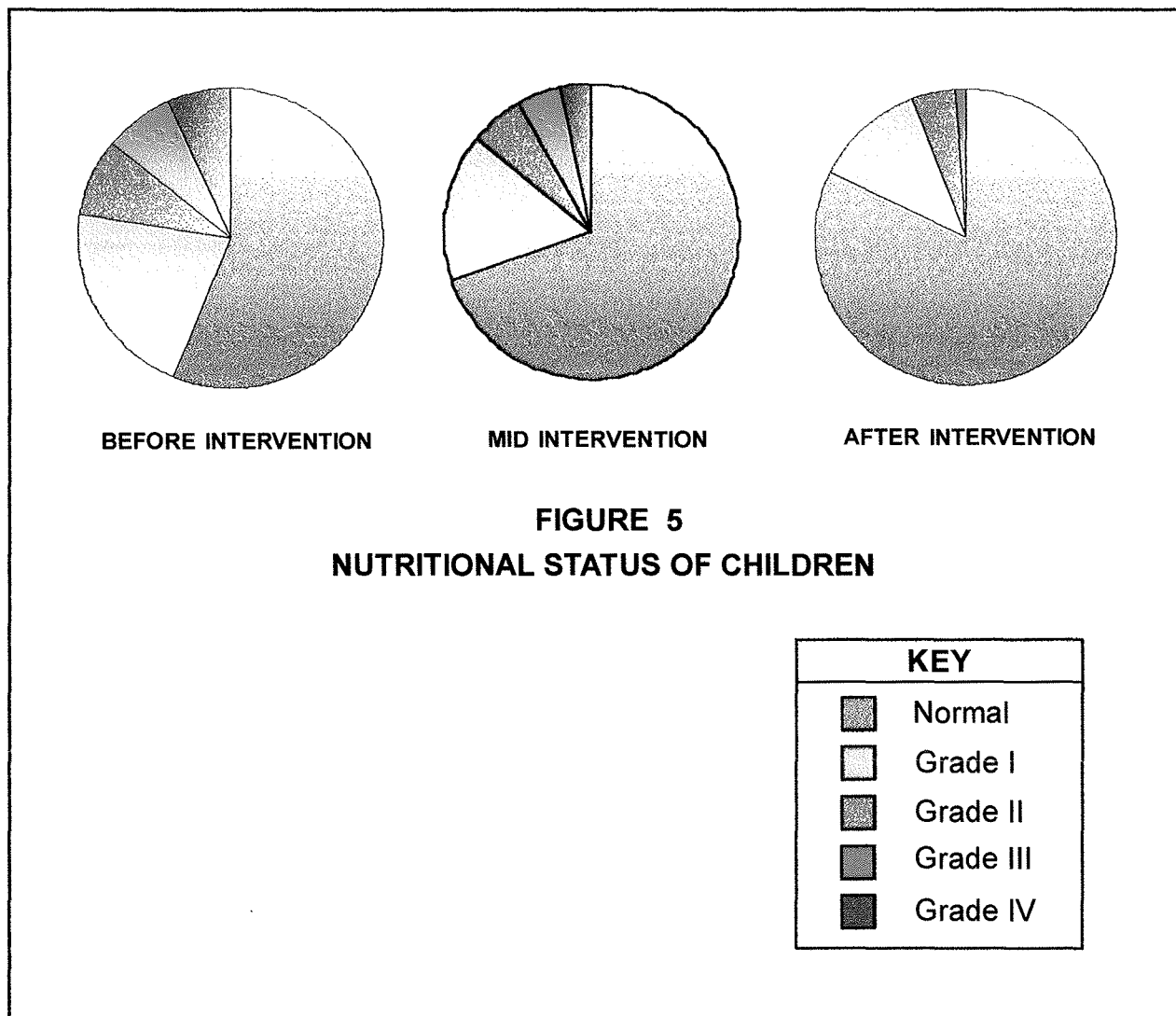
**TABLE XIX NUTRITIONAL STATUS OF CHILDREN
(0-6 YEARS)**

Details	ANGANWADIS ADOPTED BY NSS					CONTROL
	Percentage of children			"P" value		Percentage of children (n:2315)
	BI (n:2025)	MI (n:2080)	AI (n:2349)	BI Vs MI	MI Vs AI	
Normal	56.1 (1137)	69.8 (1439)	82.1 (1928)	12.803*	9.830*	75.2 (1741)
Malnutrition Grade						
I	21.3 (413)	16.1 (338)	12.2 (286)	4.091*	3.933*	11.4 (263)
II	8.3 (169)	6.0 (129)	4.5 (106)	2.647*	2.503**	7.1 (164)
III	7.5 (151)	4.8 (101)	1.2 (29)	3.471*	7.126*	5.5 (128)
IV	6.8 (137)	3.3 (72)	-	4.814**	-	0.8 (19)

It is heartening to note that at the end of the study, 82.1 per cent of the children in the adopted Anganwadies were normal without any nutritional deficiencies. The trend in the improvement of the nutritional status was also statistically significant. The volunteers with the help of NSS programme officers made continuous efforts in improving the nutritional status of the children

through ensuring the proper delivery of the services namely supplementary nutrition, health checkup, immunization and health and nutrition education.

There was a steady decrease in the number of children with different grades of malnutrition during NSS intervention and it was found to be statistically significant. There was no child with grade IV malnutrition, in the adopted Anganwadis, while in the control group, 0.8 per cent of the children were in IV grade malnutrition. These findings were positive and established the impact of NSS intervention.



4. "At risk" cases identified and referred

The impact of NSS intervention on "At risk" cases identified and referred to the hospitals in the adopted Anganwadis was compared with that of control and the results are given in Table XX.

TABLE XX "AT RISK" CASES IDENTIFIED AND REFERRED

"At risk" Cases	ANGANWADIS ADOPTED BY NSS					CONTROL
	Percentage of children			"P" value		Percentage of children (n:2315)
	BI (n:2025)	MI (n:2080)	AI (n:2349)	BI Vs MI	MI Vs AI	
Identified	5.3 (107)	4.0 (83)	1.0 (24)	1.972**	6.422*	3.7 (86)
• Referred	62.6 (67)	85.5 (71)	100.0 (24)	0.186	5.483*	59.3 (51)

• Percentage referred of the identified

Due to the cumulative effects of the delivery of inputs namely supplementary nutrition, health checkup and health and nutrition education for mothers, a marked reduction is seen in the number of "at risk" cases in all the groups of beneficiaries and the decrease is also found to be statistically significant. Another great achievement of the NSS intervention is that at the end of the study all the cases identified had been referred to the medical personnel immediately. This points out the growing awareness among the beneficiaries about medical attention whereas in the control, only 59.3 per cent of them were referred.

5. Community participation

The active participation of the community in the Anganwadi activities was almost a missing link before the intervention of NSS. The records in the centres did not indicate their participation. Through NSS, the community had understood the purpose of ICDS and its services, and the people came forward to involve themselves in the programme. The extent of participation of the community in the Anganwadi activities after the NSS intervention is as indicated in Table XXI.

TABLE XXI INVOLVEMENT OF THE COMMUNITY IN ICDS

Type of Involvement	Percentage of AWWs getting help (n:25)			
	ANGANWADIS ADOPTED BY NSS			CONTROL (n:25)
	BI	MI	AI	
Participation in the Conduct of the Anganwadis				
Participating in the festivals/celebrations	40	52	96	56
Attending meetings organised in the Anganwadis	36	48	92	52
Collecting children and mothers for health checkup/immunization	52	68	96	56
Showing interest in the progress of the children	32	44	88	48
Participating in white washing, fencing and tree planting	28	40	88	44
Helping in constructing toilets and repairing the centres	32	52	88	52
Assisting the AWWs in conducting pre-school activities	44	56	76	48
Giving Material help				
Mats	28	48	72	48
Tables and Chairs	24	40	64	28
Drinking water	20	40	72	36
Fruits and Vegetables	28	48	76	44
Sweets on special occasions	36	56	92	52
Fuel	24	36	80	48
Dresses	32	52	84	52
Slate and pencil	36	48	88	56
Chappal	20	36	76	48
Toys	32	44	80	52

Owing to closer rapport with the community there appears to be greater participation and involvement of the community in the various aspects of the ICDS both in terms of cash, kind and labour. Participation of the community in the day to day conduct of the Anganwadis is a positive out come of the NSS intervention.

C. Performance of AWWs as influenced by the capacity building efforts

1. Non-formal pre - school education

Performance of children in the pre-school activities

The performance of children in the pre-school activities before and after training the AWWs is as given in Table XXII.

**TABLE XXII PERFORMANCE OF CHILDREN IN NON-FORMAL
PRE-SCHOOL EDUCATION**

Aspects	Percentage of AWWs stating (n:25)	
	Before Training	After Training
Recitation of poems	56	92
Narration of stories	56	88
Identification of shapes	48	84
Counting numbers	36	84
Identification of parts of the body	36	76
Identification of colours	32	72

Persistent efforts to train the AWWs on the proper conduct of pre-school activities enabled them to prepare and use a variety of interesting methods and aids which resulted in the improved performance of children in pre-school education.

a. Pre-school activities conducted

Various activities conducted in the Anganwadis are shown in Table XXIII.

TABLE XXIII PRE-SCHOOL ACTIVITIES ORGANISED

Pre- school activity	Percentage of AWWs stating (n:25)	
	Before Training	After Training
Science experiences	56	92
Creative activities	48	96
Use of readiness kits	44	92
Puppet shows	44	72
Role plays	32	72
Slogans	28	100

After getting trained all the AWWs were found to be organising a variety of pre-school activities in the Anganwadis.

b. Teaching aids used

Table XXIV shows the different types of teaching aids used before and after training, as stated by the AWWs.

TABLE XXIV TEACHING AIDS USED

Teaching aids	Percentage of AWWs stating n : 25	
	Before Training	After Training
Black board	80	100
Charts (number, alphabet and animals)	72	100
Puppets	68	100
Paper cutouts	52	98
Photographs	52	98
Models	48	92
Low cost play equipment	48	88
Posters	44	88
Wooden blocks	36	86
Flash cards	36	80
Flip books	28	72
Radio	16	66

Use of puppets in addition to black boards and charts by 100 per cent of the AWWs after the training is a welcome feature, since retention and understanding of anything taught through the medium of puppet is long lasting. (Agnihotri, 1986).

All the AWWs got rich experience in learning the operation of audio-visual aids specially epidioscope, film projector and slide projector during their training period. Before training none of the workers used these aids. The Anganwadis do not have the equipment; nor do they have facilities for screening. However, after receiving training 40 per cent of the workers used these aids available with the health department. By using the film projector, the workers screened good films on nutrition, health and hygiene for the benefit of the mothers and people in the community.

2. Supplementary Nutrition

The details of the beneficiaries receiving supplementary nutrition at the centre is shown in Table XXV.

**TABLE XXV BENEFICIARIES RECEIVING SUPPLEMENTARY NUTRITION
AT THE CENTRE**

Beneficiary	Percentage of AWWs stating (n : 25)	
	Before Training	After Training
Children between 6 months and 2 years	32	96
Expectant women	24	92
Nursing mothers	16	92

After participating in the training programme, majority of the AWWs were successful in persuading the beneficiaries to come to the centre to receive the supplementary food (Sathu mavu) and eat it in the centre itself, instead of receiving it at home through the helpers.

3. Health Checkup and Immunization

Before getting training only 49 per cent of the workers could convince the beneficiaries about the importance of health checkup and immunization. As a result of their participation in the training programme, 86 per cent of the AWWs could convince the beneficiaries of the Anganwadis and also the community about the need for health checkup and immunization for children and pregnant women.

4. "At risk" cases identified and referred

As a result of their participation in training, 88 per cent of the workers pointed out that all the cases identified as "at risk" had been referred to the hospitals immediately. But before getting training, only 41 per cent of the workers could refer the "at risk" cases to the hospitals.

5. Health and Nutrition Education for Mothers

a. Frequency of House visits

The frequency of house visits made by the AWWs to disseminate health and nutrition messages to the community increased, from 8 days in a month to 20 days in a month, after getting training, reflecting the realisation on the part of the AWWs on the need for continuous contact with the community.

b. Participation of Mothers in HNE Programmes

The average number of mothers participating in the HNE programmes organised every month by the AWWs is given in Table XXVI.

TABLE XXVI ATTENDANCE IN THE HNE PROGRAMME

Average attendance	Percentage of AWWs Stating (n :25)	
	Before Training	After Training
up to 5	40	-
6 - 10	24	-
11 - 15	20	4
16 - 20	12	8
21 - 25	4	16
26 - 30	-	72

After participating in the training programmes, a large majority of the AWWs developed confidence in persuading more number of mothers to take part in the HNE programmes. More than 70 per cent Anganwadis registered an average attendance of 25-30 mothers per session which is near full coverage.

6. Community participation

The different ways of eliciting community participation before and after the training of AWWs are depicted in Table XXVII.

TABLE XXVII WAYS OF ELICITING COMMUNITY PARTICIPATION

Activity	Percentage of AWWs Stating (n : 25)	
	Before Training	After Training
House visits	100	100
Demonstrations	24	96
Group discussions	8	88
Contacting local leaders	-	76
Exhibitions	-	72
Community meetings	-	68
Forming/strengthening local organisations	-	64
Forming local co-ordination committees	-	60
Vocational skill training for income generation	-	60

The training imparted to AWWs in community participation helped them in acquiring necessary knowledge and skills regarding the ways of eliciting community participation. After the training over 60 per cent of the AWWs were able to make the community participate in ICDS programme through home visits, conducting demonstrations, group discussions, organising community meetings, contacting local leaders, putting up exhibitions, forming local organisations and local co-ordination committees. They also gained knowledge regarding vocational skill training for income generation such as preparation of phenyl, detergents soft toys etc.

After receiving training, the AWWs not only succeeded in eliciting community participation in Anganwadi activities, but also made them support ICDS both in terms of materials such as food items particularly vegetables and greens, old and new clothes, chappals etc., and in terms of man power such as assistance in conducting medical camps, cleanliness drive, immunization programme etc.

On the whole, training of AWWs proved to be an important adjunct of the NSS programme, to enhance its effectiveness.

It has been noted earlier that through NSS intervention, both the imparters of the package (NSS volunteers and AWWs) and receivers of the package (mothers and community) stand to gain through motivation and realisation of their responsibilities. Now, it has been emphasised that refreshing AWWs through training, as a part of NSS programme, also reinforces their capacities.

SUMMARY AND CONCLUSION

V SUMMARY AND CONCLUSION

This action research on “Strengthening the delivery of services of ‘Integrated Child Development Services’ (ICDS) Programme through National Service Scheme (NSS) Intervention” intended to

- study the profile of the Anganwadis in Coimbatore Corporation
- strengthen the delivery of services of ICDS through NSS intervention
- buildup the capacity of the AWWs in monitoring the delivery of services of ICDS and
- assess the outcomes of the efforts putforth by NSS.

Methodology

Out of the 365 Anganwadis in Coimbatore Corporation, 50 were randomly selected to study the profile. Out of these 50, twenty five Anganwadis were selected to strengthen the delivery of services of ICDS, through adoption and action programmes by the NSS volunteers of Avinashilingam University and capacity building efforts of the AWWs. The 25 Anganwadis not adopted by NSS served as control for comparison of the outcomes of NSS Intervention.

The major findings of the baseline survey are presented hereunder:

1. Infrastructural facilities

Eighteen Anganwadis were not having own building ; 15 Anganwadis had inadequate indoor space and 19 had poor flooring ; 47 Anganwadis had no cupboards for storing the equipments; drinking water was not available in 11 Anganwadis; 48 Anganwadis had no toilet facilities; There is no kitchen garden in 21 Anganwadis; 35 Anganwadis had no indoor play equipments (Ref. Table I)

2. Beneficiaries and Services

Attendance of the Anganwadi children was poor (55.5 per cent) against the enrolment (67.5 per cent); 54 per cent of the children were not receiving supplementary nutrition in the Anganwadis; when compared to nursing mothers, the percentage of expectant women receiving supplementary nutrition was less; 46 per cent of the children were in Grade I,II,III and IV degrees of malnutrition; by and large, all the children identified as "at risk" were not referred to the hospitals immediately (Ref. Table II to Table VII).

Improving the delivery of services through the Anganwadis

1. Arranging for the intervention of NSS

The 25 Anganwadis to be adopted by the NSS were purposively selected. Care was taken to ensure that the 25 Anganwadis were those which required special attention in terms of enrolment, attendance of the beneficiaries and delivery of services.

In all the adopted Anganwadis, the NSS volunteers had organised regular activities such as preparing low cost play materials, educating the AWWs and parents, organising women's groups and youth clubs and supervising the noon meal programme. Apart from the regular activities, NSS special camps were conducted in all the Anganwadi areas. Camp activities included repair and maintenance of the Anganwadi buildings, cleanliness drive, medical camps, tree plantation and health and nutrition education.

2. Capacity building of the Anganwadi workers

Although NSS intervention was envisaged to be a means to improve the delivery of services, capacity building of the AWW was found to be inevitable,

she being the central force for the success of the ICDS programme. No doubt the AWWs receive training given by the ICDS officials. However, they needed special training to enable them to deliver the services through Anganwadis effectively. With the permission of the ICDS officials, a 15 day training programme was organised for the 25 AWWs. The training module for the AWWs, was developed in consultation with the NSS programme officers, NSS student representatives, mothers of Anganwadi children, community representatives and AWWs themselves.

Assessing the impact of the efforts putforth by the NSS

1. Details of contribution of NSS in the Anganwadis

The details of contribution of NSS in the Anganwadis were elicited from the NSS volunteers, NSS programme officers, mothers of Anganwadi children, community representatives and Anganwadi Workers.

2. Outcomes of NSS intervention on the delivery of services in the Anganwadis

The outcomes of NSS intervention on the delivery of services in the Anganwadis were studied in terms of a. participation of children in the non-formal pre-school education, b. impact of participation in the supplementary nutrition programme, c. immunization coverage and health checkup on the beneficiaries, d. status of nutrition and health education and e. involvement of the community in the Anganwadi programmes.

3. Performance of AWWs as influenced by the capacity building efforts.

The performance of AWWs before and after training was studied as reflected in the delivery of services in the Anganwadis.

Salient Findings

1. Details of contribution of NSS in the Anganwadis

Over 70 per cent of the AWWs, programme officers and mothers and 60 per cent of the representatives of the community pointed out that the special contribution by NSS volunteers was strengthening the enrolment in the Anganwadis and improving the attendance of the children. The contribution of the NSS volunteers towards health checkup and immunization was mainly a facilitating function by way of assisting the medical team during the routine health checkup, camps and in the follow up measures i.e., ensuring referral services. All the AWWs endorsed that the NSS volunteers were persuading mothers to take part in HNE programme by the AWWs.

2. Impact of the efforts of NSS Intervention

The impact of the efforts of NSS intervention on the delivery of services of Anganwadis is shown in Table XXVIII.

TABLE XXVIII IMPACT OF THE EFFORTS OF NSS INTERVENTION

Delivery of Service	Anganwadis Adopted By NSS Percentage of Children:		Difference	Control
	Before Intervention	After Intervention		
Non-formal pre-school education (2-6 years)				
Enrolment	66.2	86.6	20.4	72.1
Attendance	55.0	78.3	23.3	61.9
Supplementary Nutrition (2-6 years)				
Received Supplementary Nutrition	89.5	98.6	9.1	87.0
Immunization (Children)				
BCG	52.0	89.4	37.4	78.8
DPT	54.6	90.3	35.7	80.2
OPV	52.7	100.0	47.3	91.7
DT	33.9	85.6	51.7	60.3
Measles	26.0	85.5	59.5	60.5
Expectant Women				
TT	52.9	100.0	47.1	69.1
Nutritional Status of Children				
Normal	56.1	82.1	26.0	75.2
Malnutrition Grade				
I	21.3	12.2	9.1	11.4
II	8.3	4.5	3.8	7.1
III	7.5	1.2	6.3	5.5
IV	6.8	-	6.8	0.8
"At risk" cases				
Identified	5.3	1.0	4.3	3.7
Referred	62.6	100.0	37.4	59.3

A steady increase in the percentage enrolment as well as attendance of the pre-schoolers in the Anganwadis (adopted) was observed which is found to be statistically significant at 1% level. The percentage of recipients of supplementary nutrition registered a marked increase in the adopted Anganwadis against the control Anganwadis. An increase was observed also in the number of beneficiaries being immunized against tuberculosis, whooping cough, pertussis, tetanus and diphtheria. The main reason for the increase in the number of beneficiaries in the adopted Anganwadis, was the series of health campaigns specially pulse polio immunization camps conducted by the volunteers through which they created awareness among the mothers about the importance of immunization to children. There was a steady decrease in the number of children with different grades of malnutrition during NSS intervention and it was found to be statistically significant. Another great achievement of the NSS intervention was that all the cases identified as "at risk" have been referred to the medical personnel immediately. Participation of the community in the day to day conduct of the Anganwadis was another positive outcome of the NSS intervention.

3. Performance of AWWs as influenced by the capacity building efforts.

After getting trained, all the AWWs were found to be organising a variety of pre-school activities in the Anganwadis using different audio visual aids. After participating in the training programme, majority of the AWWs were successful in persuading the beneficiaries to come to the centre to receive the supplementary food (Sathumavu) and eat it in the centre itself, instead of receiving it at home through the helpers. As a result of their participation in the training programme, 86 per cent of the AWWs could convince the

beneficiaries of the Anganwadis and also the community about the need for health checkup and immunization for children and pregnant women. Before getting training only 41 per cent of the workers pointed out that the cases identified as "at risk" had been referred to the hospitals immediately. But after training, 88 per cent of the workers referred the "at risk" cases immediately to the hospitals.

The frequency of house visits made by the AWWs to disseminate health and nutrition message to the community increased to a great extent after the training. Over 60 per cent of the AWWs were able to make the community participate in ICDS programme through home visits, demonstrations, group discussions, forming local organisations and local co-ordination committees. After receiving training, the AWWs succeeded in eliciting community participation in Anganwadi activities in terms of materials and man power.

On the whole, training of AWWs proved to be an important adjunct of the NSS programme to enhance its effectiveness.

Based on the outcomes of the study, the following strategies are suggested to further strengthen the ICDS programme (Figure 6).

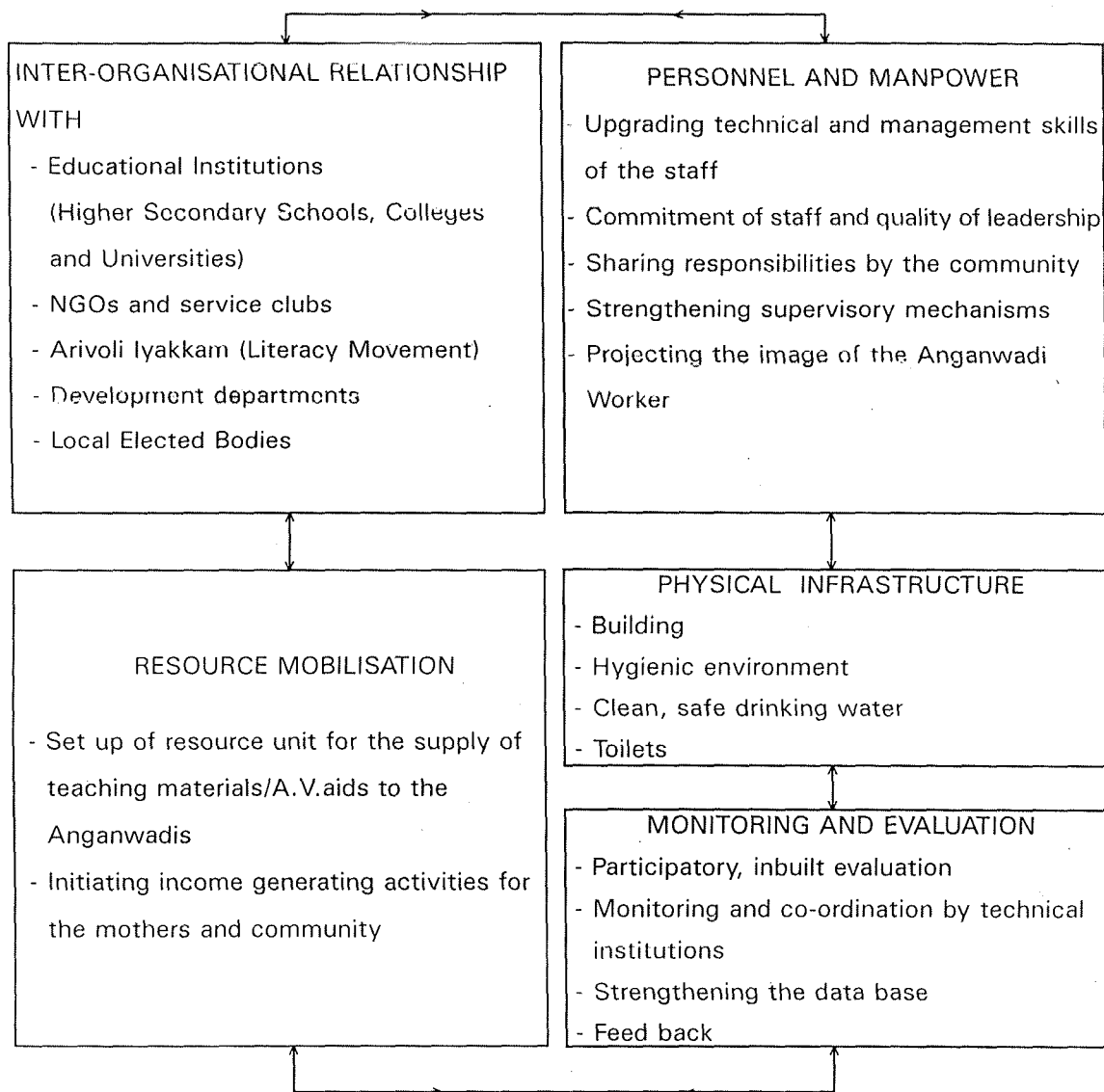


FIGURE 6

STRATEGIES FOR STRENGTHENING THE ICDS PROGRAMME

1. Inter-Organisational relationships

For the programme to be properly internalised by all concerned, internal flow of communication needs to be strengthened. Educational institutions like schools, colleges and universities should support the ICDS programme. Other private organisations like NGOs, Rotary Club, Lions Club, Arivoli lyakkam etc., should render their support through adoption of Anganwadis in their own areas of work. In this regard, an area approach needs to be envisaged to avoid duplication of efforts and to ensure that all the Anganwadis receive some support.

There should be wider publicity for the programme so that functionaries in other departments namely health, rural/urban development, adult education etc., should understand the need to network with the ICDS programme.

2. Personnel and man power

If the policies of ICDS are to be translated into meaningful action, the manpower component deserves attention.

Great care has to be exercised in the selection of AWWs and their supervisory staff. In the recruitment of AWWs with preference for candidates living in the same area (village, tribal area or slums) for greater involvement with the community.

There is significant scope for improving the productivity of staff through better training and follow up to produce a highly motivated and skilled work force. Concerted efforts must be made to provide technical and managerial skills for the staff which can be done by organising systematic training programmes both of orientation and refresher type. The training programme must be decentralised and tailored to suit local demands.

The success of the programme depends upon the commitment of the functionaries and quality of leadership within the organisation. Periodic discussion meetings for the staff atleast at the project level may go a longway in fostering these essential inputs.

One of the factors responsible for poor performance in ICDS appears to be overloading of the AWWs. The work routine of the AWWs needs to be simplified. It is a happy augury that efforts are underway to reduce the burden of record keeping in the Anganwadis.

Furthermore the image of the AWWs has to be improved and they should be given all encouragement, publicity and incentives for better work performance. The supervisory mechanisms must be strengthened both in quantitative and qualitative dimensions, which should focus on 'guidance' and not on routine 'inspection' of records.

3. Resource Mobilisation and Utilisation

The concept of providing an integrated package of health and nutrition services exemplified in the ICDS is commendable for which there is adequate provision of revenue. What is needed is a greater stress on the health inputs and timely inflow of money and materials.

Policy makers are also conceptualising to incorporate socio economic components into the programme through initiating income generating activities for the beneficiaries and also non-formal education and functional literacy (Women's Integrated Learning for Life). These components are worthy of trial.

The programme must have good media and communication support. Provision of teaching aids and materials needs to be guaranteed adequately both for non-formal pre-school education and HNE; further the functionaries

have to be trained in the preparation and use of resource materials.

Efforts must be made to produce films, filmstrips, audio and video cassettes and non-projected aids such as posters, charts and other visuals on a large scale (at the state level) and made available for use in the Anganwadis. The idea of setting up a media production centre at the state level needs to be seriously considered.

4. Physical infrastructure

Provision of good physical amenities in the ICDS centres goes a long way in creating a popular image for the programme.

The building should be spacious enough, centrally located and free from hazards and dangers of traffic. The environment should be hygienic and conducive for dissemination of health and nutrition messages. Attempts must be made to establish close linkages with the developmental departments and health and sanitation infrastructure both to construct appropriate buildings and also to maintain them properly. Creation of durable community assets have become the focal targets of several of the employment generation and guarantee programmes (such as Jawahar Rojgar Yojana). These provisions must be capitalised for raising buildings for locating the Anganwadis.

Safe drinking water and toilet facilities must be essentially provided in all the Anganwadis. Then only all the efforts towards health education with emphasis on personal hygiene would be meaningful. The policy makers should give priority to these indispensable inputs into the programme.

5. Monitoring and Evaluation :

To assess the outcomes of ICDS, evaluation must be made an inherent, inbuilt component in the overall system of delivery of services. A uniform

performance reporting and reviewing system based on the priority tasks assigned is required.

The data base has to be strengthened through scientific reporting and documentation, since ICDS has been contemplated to demonstrate the impact of convergence of package of services on the beneficiaries. The technical and training institutions may be requested to co-ordinate and guide the recording and reporting procedures. The feedback mechanisms has to be strengthened to introduce correctional measures without waste of time, efforts and resources.

Moreover the approach to evaluation must be 'participatory', involving in addition to the hierarchies, the grassroot level staff, beneficiaries and community. The mothers may be involved to maintain health cards and help in the growth monitoring exercise.

Conclusion

ICDS is a unique nationwide programme for mother and child care in India with laudable objectives. Through its integrated package of services, ICDS programme has established its credibility.

The present study has pointed out the potentials of NSS intervention in ICDS, directly by contributing to the delivery of package of services and indirectly by augmenting the capacity of the AWWs. Such efforts have immense scope for expansion and wider coverage. Based on the outcomes of the action research the following recommendations are putforth :

- The NSS at the centre and the NSS regional centres should give direction to the Universities / Colleges / Higher Secondary Schools to include mother and child care activities in their agenda, specifying the adoption of ICDS Anganwadis in the nearby areas.
- The Training and Orientation Centres and the Training Orientation and Research Centres which are the nodal institutions for training in NSS, should incorporate mother and child care and ICDS in their curriculum, to prepare the Programme Officers for work in the Anganwadis.
- The NSS Co-ordinators of the Universities and Higher Secondary Schools have to be oriented towards ICDS programme and the modality of adoption of AWs by the respective NSS units.
- The District Level Advisory Committee of NSS with the District Collector as the Chairperson, should workout an area approach for adoption of AWs by the Colleges / Higher Secondary Schools and ensure that all the ICDS centres in the District are covered.

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APPENDICES

Administration

In order to fulfil the curricular and social mandate, NSS in the University has been planned with well knit co-ordination at all levels of administration. The Chancellor of the University is the President and the Vice Chancellor, the Chairman of the advisory committee (Figure 1).

ADMINISTRATIVE SET UP OF NSS AT AVINASHILINGAM UNIVERSITY

ADVISORY COMMITTEE

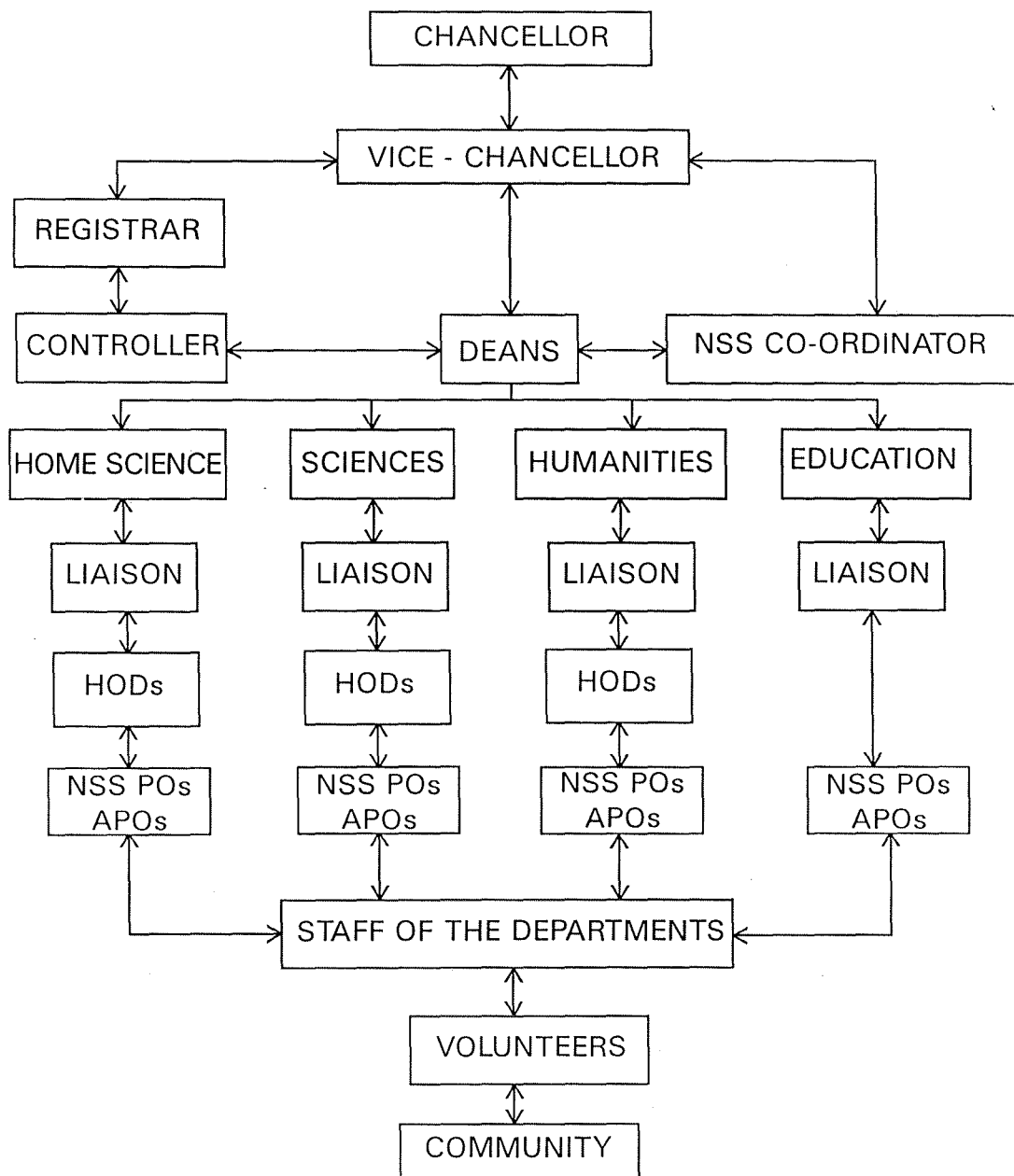


FIGURE 1

The unique feature has been to create the position of a liaison officer for each faculty to be held by a senior staff of one of the departments in the faculty. They monitor the implementation of the programme by the NSS units allotted to their respective faculties and guide the Programme Officers and other staff assisting in the programme.

Syllabus

The syllabi for NSS prepared by a special Board of Studies and approved by the University Academic Council, consist of theory as well as practical component (Enclosed). Each teacher is provided with a guide book covering the topics in the syllabi.

Training and Orientation

With the help of the Training and Orientation Centre, Sri Avinashilingam Education Trust Institutions, special orientation programmes are arranged for the Programme Officers and Assistant Programme Officers to equip them to undertake NSS as a curricular component.

Modalities of Operation

Regular Activities

Two hours are allocated for NSS in the weekly time table. The hours are distributed throughout the week for the different classes.

Training in 'Yoga' and campus cleanliness and beautification are the activities undertaken by the first year NSS.

The focal thrust for the II and III years is on the Anganwadis of the Integrated Child Development Services (ICDS) Programme in Coimbatore Corporation.

Programmes are chalked out to foster total development of the areas, utilising the Anganwadis as fulcrums for pre-school education, nutrition and health education for the children and their parents, total immunization of all eligible children, resource and infrastructure mobilisation from the Corporation and District Development Departments, women's empowerment through organising and strengthening Self Help Groups and eliciting community participation and responsibility for follow up.

Special Camps

From 1991 -1995, the special camps for 10 days for 50 per cent of the volunteers from each unit were conducted in the slums where Anganwadis were located. The theme for the special camps is selected as per the suggestions of the Government of India.

Attendance for NSS Theory Paper

As per the University norms, 90 per cent is the minimum attendance required for writing the comprehensive examination. This is applicable for NSS theory papers also. Those who have secured 80 - 89% will have to pay a condonation fee of Rs.50 per paper. Those who have secured 70 - 79% attendance will be permitted to take up the Comprehensive Semester Examination at the next supplementary Examination held in June. Those who secure less than 70% attendance should repeat the semester for NSS after completing the six semesters.

Pattern of Evaluation

The pattern of Evaluation in NSS is as follows :

year	Semester	Aspects	Marks	Total
I	I	Field work	15	
		Mid term test	10	
	II	Field work	15	
		Mid term test	10	
		Semester Exam	50	100
		NSS Paper I		
II	III	Field work	15	
		Mid term test	10	
	IV	Field work	15	
		Mid term test	10	
		Semester Exam	50	100
		NSS Paper II		
III	V	Field work	15	
		Mid term test	10	
		Field work	15	
		Mid term test	10	
		Semester Exam	50	100
		NSS Paper III		
		Special camp	80	
		Special activities	20	100
		Grand Total		

Break up for field work

Criteria	Marks
Attendance	5
Participation	5
Reporting	5
Total	15

Break up for special camp

Criteria	Marks
Attendance	20
Participation*	20
Leadership	20
Reporting	20
Total	80

***Participation is assessed on the following pattern :**

Criteria	Marks
a. Survey/fact finding	5
b. Programme planning	5
c. Resource mobilisation	2
d. Teaching aids	3
e. Implementation	5
Total	20

As for attendance, a minimum of 90 per cent is required (i.e., 9 days of the camp). The students who have secured 80 - 89 per cent, may not get marks for attendance but will be eligible to write NSS paper. Those who secure less than 80% attendance will have to repeat the camp with the next batch with a penalty of Rs. 500. However no marks will be awarded to her for the special camp.

Special Activity

The NSS, as per requirement, expects each student to give 240 hours of service. As per the NSS structure of the University, each student gives 180 hours (30 hrs/Semester) during the period of 3 years through regular activities and 60 hours (10hrs/Semester x 6 Semesters) through special activities, thus making the total to be 240 hours. Each NSS unit takes up two special activities of five hours duration per semester to make up the 60 hours.

The special activity can be conducted in the adopted area/village. The suggested special activities are, medical camp, health and environmental education, AIDS awareness camp, trekking, tree planting, cultural programme for awareness generation, kitchen gardening and educational exhibition.

At the end of the academic year, the students are awarded letter grades based on their performance and these grades are incorporated in their degree transcript.

Conclusion

Feed back of the evaluation of NSS by the students, faculty as well as representatives of the community reveals the positive impact of this innovative

experiment of Avinashilingam University in fostering and promoting social change. This experiment has retained its credibility and legitimacy and also gained community support by addressing to their pivotal issues such as pre-school education, health, women's development, technology adoption, capacity building and community leadership, all of which would enhance the quality of life of the mass.

Every year the NSS is also evaluated from the point of view of the students as well as the teachers using specified schedules. This evaluation has confirmed that the latent talents of the students which do not surface in the normal class room situation such as decision making, team work, managerial skills, leadership, sense of responsibility, ability for oral and written presentation, positive attitude towards the downtrodden etc are brought out and enable the students to become worthy citizens.

ENCLOSURE
SYLLABUS FOR NSS

Paper : National Service Scheme

Class : I, II and III years

Major : B.A., B.Sc., B.Com.

Objectives

1. To instill the concept of service in students
2. To prepare the students for the NSS activities

Paper	Theory	Hours of Instruction
I year	1. Need for mobilising youth power for National Development. Extension as the Third Dimension of Higher Education	5
Paper - I	2. Genesis, objectives and aims of NSS, emblem and moto, organisation and administration of NSS	5
	3. Regular activities and Special camp activities under NSS	5
	4. Training in NSS - orientation and refresher. TOC and TORC - set up and functions	5
II year	1. Problems of rural and urban poor, their status	5
Paper II	2. Local self government-Panchayati Raj System. 73rd and 74th Amendments and implications	5

	3.	Role of NSS volunteers in Voter Awareness Programme. Human Rights-educating the community	5
	4.	Programmes for student and non-student youth. Local voluntary organisations collaborating with NSS for their activities	5
III year	1.	Linking NSS with subject matter	5
Paper III	2.	Programme planning for NSS, Developing rapport in the community, data collection. Infrastructure for development	5
	3.	Integrating NSS with development programmes - health and sanitation, literacy, economic programmes, socio - cultural programmes	5
	4.	Evaluation of NSS -need, methods and criteria for evaluation. Monitoring, supervision, evaluation and reporting	5

APPENDIX I

NATIONAL SERVICE SCHEME - AVINASHILINGAM UNIVERSITY MODEL

The University Grants Commission in their policy frame on higher education recognised 'Extension' as the third dimension of the higher education system in addition to the earlier two-fold dimensions of teaching and research. The policy frame states thus :

" If the University system has to discharge adequately its responsibilities to the entire education system and to the society as a whole, it must assume 'Extension' as the third important responsibility and give it the same status as research and teaching. This is a new and extremely significant area which should be developed on the basis of high priority".

Avinashilingam University has been fulfilling the social obligation of higher education ever since its inception even as a college in 1950's.

The founder of this educational edifice, late Dr.T.S.Avinashilingam had a lofty vision that the college should not function in isolation as an ivory tower but should extend its services to the community. Under the dynamic leadership of the Chancellor of the University, Dr. Rajammal P. Devadas, the institution has been sharing its resources, knowledge and manpower to meet the overall and diverse learning needs of all segments of the community.

With its rich heritage of participating in the National Service Scheme (NSS) from its inception in 1970's , the institution, when it attained the Deemed University status, ventured to introduce NSS in the undergraduate curriculum from 1991 -1992. Today there are 25 NSS units involving all the undergraduate students and B.Eds., taken care of by 96 staff members.

APPENDIX II

LIST OF ANGANWADIS

Project No.	Anganwadi No.	Area
I	47,48	Karuppusamy Nagar
	82	Venkitapuram
	93	Velandipalayam
II	127,129	Devangapet
	131	Wedderburnpet
	136,147	D.B. Road
	149,161,190	Kamarajapuram
	151,152	Lawley Road
	162,164	Ramalingamcolony
	163,167	Hosminnagar
	165,172	Rajunagar
	166,168	Karunanidhinagar
	173,193	Gandhinagar
	175,176,177,178,180,	
	181,182,183,184	K.K.Pudhur
	184,188,191	Venkitapuram
197,198	Kovilmedu	
III	244,245	Maniagarampalayam
	266,267	Police quarters - Gandhipuram
	269,270,271	Shithapudhur
	279,284,285	Kannappanagar
	286,287	Hosminnagar

APPENDIX III

CHECK LIST TO EVALUATE THE AMENITIES AND FACILITIES IN THE ANGANWADIS

ICDS Centre No : Project No : Place :

Name of the AWW :

Amenities and Facilities

S.No.	Item	Criteria	Evaluation	
			Yes	No
1.	Tenancy	<ol style="list-style-type: none">1. Corporation building2. Rented building3. Schools4. Maternity Hospital5. Private		
2.	Physical set-up	<ol style="list-style-type: none">1. Adequate indoor space2. Adequate outdoor space3. Good lighting4. Good ventilation5. Good flooring6. <u>Surrounding of Anganwadi</u><ol style="list-style-type: none">a. Uncovered drainsb. Heaps of garbagec. Cattle shed/ animal shelterd. Slush/stagnant water		

3.	Equipments	<ol style="list-style-type: none"> 1. Equipments for general use 2. Kitchen equipments 3. Bathroom equipments 4. Indoor play equipments 5. Audio - visual aids 	
4.	Other amenities	<ol style="list-style-type: none"> 1. Water supply 2. Toilet 3. Storage of water 4. Storage of provisions 5. Storage of equipment 6. Kitchen garden 	

APPENDIX IV

SCHEDULE TO ELICIT INFORMATION FROM THE AWWs ON THE PACKAGE OF SERVICES

(Pre and Post Intervention of NSS)

1. Identification

Name of the AWW : Project No. : Place :

2. Package of Services

a. Non-formal pre-school education

(i) Enrolment and attendance of pre-school children (2-6 years)

Particulars	Number
Total no of children in the area	
Enrolment	
Attendance	

(ii) Programme schedule for pre-school education

b. Beneficiaries receiving supplementary nutrition

Beneficiary	Number			
	Total no of Beneficiaries	Enrolled	Attended	Received supplementary nutrition
Children				
a. 6 months - 2 years				
b. 2 years - 6 years				
Expectant women				
Nursing mothers				

c. Immunization coverage among beneficiaries

Particulars	Number
Children	
BCG	
DPT	
OPV	
DT	
Measles	
Expectant women	
TT	

d. Nutritional status of children (0-6 years)

Details	Number
Normal	
Malnutrition Grade	
I	
II	
III	
IV	

e. "At risk" cases identified and referred

"At risk" cases	Number
Identified	
Referred	

f. Health and Nutrition Education

Particulars	Number
HNE programmes conducted	
Women attended	

g. Community participation (✓ mark)

Type of Participation	Number
Distributing	
Toys	
Mats	
Furniture	
Cash	
Slates	
Others	
Participating in	
Preschool activities	
White washing	
Black board painting	
Anganwadi floor repairing	
Festivals and celebration	
Others	

APPENDIX V
TRAINING MODULE - PLAN OF ACTION

Objective	Activity	Method	Input	Agency
Orientation	Objective	Lecture	Training	Principal Trainers Training Centre, Avinashilingam Deemed University (ADU)
	Planning Anganwadi Programmes	Small group task	Training	Professor, Human Development (ADU)
	Principles, needs, factors influencing the daily schedule	Large group task	Training	Professor, Human Development (ADU)
	Utilising the services of NSS in the Anganwadi Programme	Lecture Group Discussion	Training	Trainers Training Centre
Nutrition	Methods of cooking Mixed vegetables and cereals	Lecture Demonstration Demonstration Group Discussion	Raw Materials Equipments	Nutrition experts from Training Centre
Child Development Activities	Composing developing songs, rhymes	Group Discussion, Use of AV aids	Education (Teaching songs)	Expert in Human Development (ADU)
	Planning weekly schedule of AWW	Group Discussion	Education	Expert in Human Development (ADU)
	Play and its importance	Demonstration	Play materials	Expert in Human Development (ADU)
Preschool Activities	Play equipment Creative activity, skill experience	Demonstration	Equipment Materials	Trainers Training Centre Trainers Training Centre

Preschool activities	Readiness kit	Demonstration	Materials	Trainers Training Centre
Communication	Techniques of motivation	Lecture Small group task	Education Training	Trainers Training Centre,
Leadership	Roles and qualities	Group discussion	Training	Trainers Training Centre
Environment	Need and importance concept	Lecture small group task	Games	Trainers Training Centre
Health	Immunization	Lecture Film show, Use of AV aids	Education Vaccire	Medical Practitioner (ADU)
Sanitation	Soak pit	Demonstration	Education materials	Trainers Training Centre
Pre-school activities	Readiness kit	Demonstration	Natural	Trainers Training Centre
	Low cost equipment	Demonstration	Equipment	Trainers Training Centre
Play activities	Indoor and outdoor games	Demonstration	Games	Trainers Training Centre
Health and sanitation	Soakpit and low cost latrines	Demonstration	Education Use of AV aids	Training Training Centre
Income Generation	Detergents	Group Discussion Demonstration	Training Raw material	Trainers Training Centre
Health	First aid & Home remedies	Lecture Small group task, Demonstration	Equipment Material	Medical Practitioner (ADU)
Water	Purification	Lecture	Education	Avinashilingam Deemed University
	Water borne diseases	Small group task, Group discussion, AV Aids	Training	
Evaluation	Practice teaching	Practical experience	Education	Trainers Training Centre

d. Referring 'at-risk' cases to hospitals

e. Others

8. Are you conducting Health and Nutrition Education Programme to mothers regularly?

Yes: No:

If yes, how many classes are you conducting per month?

9. On an average, how many mothers are attending for each programme?

10. Mention the topics you have discussed in the meetings.

11. List your contribution to the community.

APPENDIX - VII

SCHEDULE TO ELICIT INFORMATION FROM THE NSS PROGRAMME OFFICERS ON THE PACKAGE OF SERVICES

1. Identification

- a. Name of the programme officer :
- b. Age :
- c. Educational Qualification :

2. List the contribution of NSS towards Non-formal pre-school education,
(✓ Mark)

- a. Teaching songs, stories, alphabets and numbers
- b. Preparing and using visual aids
- c. Regularising the attendance of children
- d. Conducting indoor and outdoor games
- e. Others

3. List the contribution of NSS volunteers towards supplementary nutrition.
(✓ Mark)

- a. Supervising noon meal programme
- b. Serving food to children
- c. Assisting in food preparation
- d. Helping in distributing 'Sathumavu'
- e. Others

4. Mention the different activities carried out by the volunteers in relation to health checkup and immunization. (✓ Mark)
- a. Distributing medicines to children
 - b. Organising different camps
 - c. Bringing children to the spot during immunization camp
 - d. Referring 'at-risk' cases to hospitals
 - e. Others
5. Are the volunteers conducting Health and Nutrition Education Programme to mothers regularly?
- Yes: No:
- If yes, how many classes they are conducting per month?
- In an average, how many mothers are attending for each programme?
6. Mention the topics the volunteers discussed in the meetings.
7. List the contribution of NSS volunteers to the community.

APPENDIX - VIII

**SCHEDULE TO ELICIT INFORMATION FROM THE MOTHERS OF
ANGANWADI CHILDREN ON THE PACKAGE OF SERVICES**

1. Identification

- i. Name of the Mother : Centre No : Place :
ii. Age :

2. Are you aware about the involvement of NSS volunteers in Anganwadi activities?

Yes : No :

3. List the contribution of NSS towards Non-formal pre-school education.

(✓ Mark)

- a. Teaching songs, stories, alphabets and numbers
- b. Preparing and using visual aids
- c. Regularising the attendance of children
- d. Conducting indoor and outdoor games
- e. Others

4. List the contribution of NSS volunteers towards supplementary nutrition

(✓ Mark)

- a. Supervising noon meal programme
- b. Serving food to children
- c. Assisting in food preparation
- d. Helping in distributing 'Sathumavu'
- e. Others

5. Mention the different activities carried out by the volunteers in relation to health checkup and immunization. (✓ Mark)

- a. Distributing medicines to children
- b. Organising different camps
- c. Bringing children to the spot during immunization camp
- d. Referring 'at-risk' cases to hospitals
- e. Others

6. Are the volunteers conducting Health and Nutrition Education Programme to mothers regularly?

Yes: No:

If yes, how many classes they are conducting per month?

In an average, how many mothers are attending for each programme?

7. Mention the topics the volunteers discussed in the meetings.

8. List the contribution of NSS volunteers to the community.

APPENDIX - IX

AN INTERVIEW SCHEDULE TO ELICIT INFORMATION FROM THE COMMUNITY REPRESENTATIVES ON THE PACKAGE OF SERVICES

1. Identification

i. Name of the Interviewer : Place :

ii. Name of the Interviewee :

2. Are you aware about the involvement of NSS volunteers in Anganwadi activities?

Yes : No :

3. List the contribution of NSS towards Non-formal pre-school education.

(✓ Mark)

a. Teaching songs, stories, alphabets and numbers

b. Preparing and using visual aids

c. Regularising the attendance of children

d. Conducting indoor and outdoor games

e. Others

4. List the contribution of NSS volunteers towards supplementary nutrition.

(✓ Mark)

a. Supervising noon meal programme

b. Serving food to children

c. Assisting in food preparation

d. Helping in distributing 'Sathumavu'

e. Others

5. Mention the different activities carried out by the volunteers in relation to health checkup and immunization. (✓ Mark)

- a. Distributing medicines to children
- b. Organising different camps
- c. Bringing children to the spot during immunization camp
- d. Referring 'at-risk' cases to hospitals
- e. Others

6. Are the volunteers conducting Health and Nutrition Education Programme to mothers regularly?

Yes: No:

If yes, how many classes they are conducting per month?

In an average, how many mothers are attending for each programme?

7. Mention the topics the volunteers discussed in the meetings.

8. List the contribution of NSS volunteers to the community.

APPENDIX - X

AN INTERVIEW SCHEDULE TO ELICIT INFORMATION FROM THE ANGANWADI WORKERS ON THE PACKAGE OF SERVICES

1. Identification

Name of the AWW : Centre No. : Place :

2. List the contribution of NSS towards Non-formal pre-school education.

(✓ Mark)

- a. Teaching songs, stories, alphabets and numbers
- b. Preparing and using visual aids
- c. Regularising the attendance of children
- d. Conducting indoor and outdoor games
- e. Others

3. List the contribution of NSS volunteers towards supplementary nutrition.

(✓ Mark)

- a. Supervising noon meal programme
- b. Serving food to children
- c. Assisting in food preparation
- d. Helping in distributing 'Sathumavu'
- e. Others

4. Mention the different activities carried out by the volunteers in relation to health checkup and immunization. (✓ Mark)

- a. Distributing medicines to children
- b. Organising different camps
- c. Bringing children to the spot during immunization camp
- d. Referring 'at-risk' cases to hospitals
- e. Others

5. Are the volunteers conducting Health and Nutrition Education Programme to mothers regularly?

Yes: No:

If yes, how many classes they are conducting per month?

In an average, how many mothers are attending for each programme?

6. Mention the topics the volunteers discussed in the meetings.

7. List the contribution of NSS volunteers to the community.

APPENDIX XI

SCHEDULE TO ELICIT INFORMATION FROM THE ANGANWADI WORKERS ON THE TRAINING PROGRAMME

1. Identification

- i. Name of the AWW : Centre No. : Place :
- ii. Age : :
- iii. Educational Qualification :
- iv. Marital Status : Married : Unmarried :
- v. Working experience in ICDS : (Years)

2. List the performance of children in non-formal pre-school education.

3. List the various activities you are conducting while organising pre-school activities?

4. Are you using teaching materials

Yes : No :

If yes, list the different teaching materials

5. Give the details on beneficiaries receiving supplementary feeding?

Beneficiary	Number
-------------	--------

Children between	
------------------	--

6 months - 2 years	
--------------------	--

Expectant Women	
-----------------	--

Nursing Mothers	
-----------------	--

6. List your role in health checkup and immunization

7. What is your contribution in the referral services?

8. Are you conducting HNE programme regularly to mothers?

Yes : No :

If Yes, give the attendance of the mothers

9. List your contribution towards the community