Chapter 1

INTEGRATED CHILD DEVELOPMENT SERVICES

THE INSTITUTION OF ANGANWADI

Genesis

About 40 per cent of India's total population of 844.3 millions in 1991 was below 14 years comprising about 283.3 millions. Nearly 124.2 million of these were below six years constituting 14.7 percent of the total population in India (Census, 1991). Many children in India still do not have access and opportunities to meet their basic rights such as proper housing, health, education and recreation. For many children, deprivation begins even before they are born. Although over the years there has been improvement in the quality of life of people in India, the situation is still far from satisfactory. For example, in 1988, the infant mortality rate was 94 per 1000 live births; mortality rate for children between 0-4 years was estimatedly 33.3; the crude birth rate was still as high as 31.5; little less than half the population was illiterate; although enrolment ratio of children in class I-V (1989-90) was almost cent per cent the drop out rate was as high as 46.97 (1987-88). The deprivation of girls in each of the above indicators was more acute than of the boys (Department of Women and Child Development, 1992).

The Indian Constitution seeks to protect children and youth against moral and material hardships.
constitutional requirement has received considerable attention since India launched its five year plans. During the first four Five Year Plans, social welfare services were confined mainly to the provision of relief services. It was during the Fifth Five Year Plan (1974-79) that a shift in the approach and strategy emerged and greater emphasis was laid on preventive and developmental programmes of social welfare, integration between social and economic aspects of planning and expansion of basic health services, nutrition, child care, functional literacy, etc. Child welfare, during this plan was accorded the highest priority (Planning Commission, 1982). The Government of India had earlier adopted a National Policy for Children in 1974 declaring children as a supremely important asset of the nation. The policy enjoined the states to provide adequate services for children both before and after birth and during the period of growth to ensure their full physical, mental and social development (Sunder Lal, 1988).

Following this policy, it was also felt that a coordinated effort through an integrated programme package of services would have a greater impact than the sum total of individual inputs provided independently. Driven by this concept and guided by the National Policy on Children, a new programme called the Integrated Child Development Services (ICDS) Scheme was thus formulated in 1975. It was initially launched on an experimental basis in 33 projects. By December 1991, the scheme got expanded to cover 2596 projects.
in the country (Sobti and Krishnamurthy, 1992).

The ICDS Scheme

The Anganwadi Worker (AWW) – the subject of this research, is the field level functionary of the Integrated Child Development Service (ICDS) scheme. The ICDS is the biggest and the most ambitious national intervention by Government of India for the overall development of poor children under six years.

Objectives and Activities

The aim of the ICDS programme is to create a congenial environment for children below six years to enable them to develop into their fullest potential. It takes a holistic view of the development of the child and attempts to improve both his pre-natal and post-natal environment. Since mother has a key role in development of the child, women between 15-45 years are also covered by the programme, as these are child bearing years in the life of a woman and her nutritional and health status has a bearing on the development of the child. The specific objectives (Ministry of Education and Social Welfare, 1976) of the ICDS are:

- To improve the nutritional and health status of children in the age group of 0-6 years;
- To lay the foundations for proper psychological, physical and social development of the child;
- To reduce the incidence of mortality, morbidity, malnutrition and school drop out;
To achieve effective coordination of policy and implementation amongst the various departments to promote child development; and

To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

ICDS is a unique programme which encompasses the main components of human resource development, namely health, nutrition and education (Department of Women and Child Development, 1991:2-3). These sectoral needs are realised through a package of services consisting of:

1. Supplementary Nutrition
2. Immunisation
3. Referral Services
4. Health and Nutrition Education
5. Non-formal pre-school education.

Organisation: The Anganwadi

The administrative unit for the location of an ICDS project is a group of slums in urban areas, a community development block in rural areas and a tribal development block in tribal areas.

An 'anganwadi' is a mother and child development centre and is the focal point for delivery of the package of services. It covers about 1000 population in rural/urban areas and 700 in tribal area. The key person managing the anganwadi is known as the anganwadi worker (AWW). The programme guidelines refer to AWW as a woman of at least 18
years of age, she is a voluntary and honorary worker and is chosen from the community she is supposed to serve. After undergoing training for three months, she is to work for approximately 200 households or 1000 population. The AWW receives an honorarium for her 4 and 1/2 hours of work every day, six days a week. She is assisted by a helper who is generally an elderly woman belonging to the local community.

For every 25 anganwadies, there is an ANM (Auxiliary Nurse Midwife). A cluster of 20-25 anganwadies (in urban and rural settings) and 17 anganwadies (in tribal areas) constitute a sector or circle supervised by a Mukhya Sevika or Supervisor and the overall responsibility of the project lies with the Child Development Project Officer (CDPO). Both of these are government employees (see Figure 1) (Sunder Lal, 1988).

Encouraged by the performance of the initial experimental 33 ICDS projects, the government of India has continued to expand the ICDS coverage to reach many more children and mothers. By December 1991, there were 2596 ICDS projects covering nearly 120.72 lakhs children in the age group of 0-5+ and 27.20 lakh mothers (Sobti and Krishamurthy, 1992).

Training Structure

Training is an important input in the ICDS scheme. The scheme achieves this objective through a three tier training structure. At the apex is the National Institute of Public
Figure 1

- Child Development Project Officer
- Mukhya Sevika/Supervisor
- Anganwadi Worker
- Helper

Covers about 1000 Population in rural and urban areas about 700 population in tribal areas.

- Supervise — 20 Angan in rural areas.
- 17 Anganwadis in tribal areas
- 25 Anganwadis in urban areas
Cooperation and Child Development (NIPCCD) which is responsible for training the CDPOs, ACDPOs and trainers. A network of twenty Middle Level Training Centres (MLTCs) at the state level are responsible for training of supervisors and the instructors of Anganwadi Training Centres (AWTCs). The training of AWWs is imparted by about 300 AWTCs located in different states and union territories. These centres are run by voluntary organisations, State Governments and professional and educational institutions (Shah, 1991).

Service and their Delivery System

As mentioned earlier, the ICDS scheme envisages a delivery package of services during the early childhood period, in an integrated manner, in order to maximise the overall impact. The responsibility for delivering all these services lies with the anganwadi worker. She is expected to:

1. Impart non-formal education to children between 3-6 years old;
2. Conduct community survey and enlist beneficiaries;
3. Arrange and provide supplementary nutrition to children and pregnant and lactating mothers;
4. Provide primary health care and first aid to the community;
5. Assist health staff in immunisation and health check-ups;
6. Refer severely malnourished, sick and at risk children to hospitals;
7. Impart health and nutrition education;
8. Enlist community support for anganwadi functions;
9. Organise women's groups and mahila mandals; and
10. Maintain records and registers.

As incharge of the anganwadi centre, the anganwadi worker is fully responsible for effectively delivering the services at the anganwadi (Ministry of Human Resource Development, 1986).

Monitoring and Evaluation

Over the years, the monitoring system has undergone modifications. At present, the Ministry of Human Resource Development through the Department of Women and Child Development is responsible for the overall monitoring of the ICDS programme. The management information system ensures upward flow of information from each anganwadi. There are two channels of monitoring system. One entitled 'Monthly Progress Report' (MPR) relates primarily to the social welfare components and the other 'Monthly Monitoring Report' (MMR) concerns with health and nutrition components. Both the reports are prepared by the AWW. To generate all the information, the AWW has to maintain a good number of registers such as registers for survey, immunisation, pregnant and lactating women, services for children, food stock register and diary-cum-visit book. The AWW also maintains growth charts and health cards. The reports flow through two different channels. The MPR is compiled by the
Department of Women and Child Development and the MMR is compiled by the Central Technical Committee at the All India Institute of Medical Sciences (AIIMS) to monitor the health and nutrition components (Tandon, 1991).

Review of ICDS Scheme Functioning and Impact

To what extent has the programme achieved its objectives? Have the services rendered had any impact on the development of children and mothers? What are its strengths and weaknesses? These and many other questions related to functioning, structure and delivery of services under ICDS have been the concern of many researchers, academicians and policy makers ever since the inception of the scheme. Following is an overview of the research findings highlighting the impact of the various services on the development of children and mothers.

Supplementary Nutrition

Nutrition is considered to be the most important and obvious priority of total development under the ICDS package. It includes supplementary nutrition for children with specific attention to malnutritional children and pregnant and lactating mothers.

Malnutrition is a manifestation of larger syndrome of poverty. It is closely linked with large families, low income levels, unemployment, lack of environmental sanitation, and safe drinking water. The prevalence of large incidence of malnutrition and nutrition deficiency diseases
has been a concern in India ever since the formulation of First Five Year Plan. Malnutrition is more prevalent among pre-school children and women, making them vulnerable to diseases and lower immunity levels. According to the National Nutrition Monitoring Bureau (1984), nearly 80 per cent children below age 13 years had intakes below those recommended for their respective ages. Over 75 per cent of the pregnant and 80 per cent of lactating women in sedentary activity and cent per cent moderately active pregnant or lactating women failed to consume recommended dietary intake. Approximately, 120,000 women die of maternity related causes every year in India (World Bank, 1991:125-127).

The prevalence of high incidence of malnutrition and nutrition deficiency diseases has always been a concern in India. Ever since the formulation of the First Five Year Plan when nutrition was recognised as the most important factor in the maintenance of health and prevention of diseases, it has received considerable attention in all the subsequent Plans. In view of the magnitude of the problem and limited resources, priority was accorded to vulnerable groups such as infants, toddlers, school going children, pregnant and lactating mothers. Several programmes were started to improve the nutritional status of these vulnerable groups. Some of the noteworthy programmes were Welfare Extension Programme and Family and Child Welfare Programme; Expanded Nutrition Programme; Mid-day Meals Programme and the
Special Nutrition Programme. Subsequently, in the Fifth Plan, it became an integral component of the ICDS programme. Enhancing nutritional status, therefore, became a priority area in ICDS which aims to help in the survival and development of children and expecting and lactating mothers (Department of Women and Child Development, 1991).

Supplementary Nutrition in ICDS

All nutrition comes from food. Therefore, in order to provide optimal nutrition, the quantity and quality of food is of paramount importance. When the diet is not adequate to meet the requirements of the body, supplementation becomes necessary to fill in the diet gap. Research in this area indicates that Protein Energy Malnutrition (PEM) is one of the major problems among the poorer sections of the population. The children below six years generally have a dietary gap of 300 calories and of 10 to 12 gms. protein per day. Similarly, the gap registered in the case of pregnant and lactating women is around 500 calories and 15 to 20 gms. protein per day. Accordingly, in the supplementary nutrition component of the ICDS scheme, a norm for providing a daily ration of 300 calories and 10 gms. of protein to the child and about 500 calories and 20 gms. of proteins to the mother has been adopted. The supplementary food is provided either in the form of a processed ready-to-eat food or as food cooked on the spot. While the calorie norms remain the same, there is flexibility regarding the type of food given which depends on the acceptability and availability (Nandi,

Cost: The per unit cost for nutritional supplements in ICDS is as follows:

- For child (6-72 months) 65 paise/day
- For child (severely malnourished) 115 paise/day
- For pregnant and lactating mothers 95 paise/day

The per unit cost includes the expenditure incurred on food, transport, fuel, condiments, spices and vitamin fortification. In addition, 10 paise per unit administration cost is financed by the government. Feeding is done at the anganwadi centres for 300 days in a year (Sunder Lal, 1988).

Coverage

Supplementary nutrition covers the largest number of beneficiaries in the ICDS programme. In September 1991, it was reported that 61.61 lakh children below 3 years, 67.11 lakh children between 3-6 years of age and 27.20 lakh lactating and pregnant women were receiving supplementary nutrition (Sobti and Krishnamurthy, 1992). But what has been the impact of this programme which is not only the largest but also the costliest component of the package?

Impact

Supplementary nutrition is perhaps the most researched component of ICDS. Besides being closely monitored by AIIMS, several individuals and institutions have also conducted a series of studies on the functioning of this
component and its impact on the beneficiaries.

Impact on Malnutrition Level and Growth of Children

The most important indicator to measure the success or failure of this component is the status of malnutrition and nutrition deficiency diseases in a community. The studies conducted do not reveal a uniform improvement in the nutritional status. There are many studies that claim that the incidence of Protein Energy Malnutrition is comparatively lower in the ICDS blocks and the nutritional level is better than those of the non-ICDS areas. Several studies have also reported that a higher percentage of normal children was found in ICDS areas than in the non-ICDS areas (Mehendale 1982; Masood 1984; Tandon 1984; Gupta 1982; Krishnamurthy 1983; Thakur 1984; Chandra and Thayar, 1984; Sunder Lal, 1977 & 1982; Adhish, 1985).

A longitudinal study (1975-1988) of ICDS projects of the Central Technical Committee (CTC) on health and nutrition showed that malnutrition among children in ICDS projects which started in 1975, declined from 19.1 to 6.3 per cent and grade-II malnutrition declined from 27.0 to 19.7 per cent during the eight years of this follow up study. Normal and grade-I nutritional status improved from 47.2 to 72.6 per cent. The report also showed that vitamin deficiency and incidence of anemia among pre-school children was found to be less in ICDS areas as compared to the non-ICDS areas. On the other hand, as per the information supplied by the states, the Comptroller and Auditor General report (1990)
stated that there was no significant improvement in the health status of malnourished and severely malnourished children in Chandigarh, Karnataka and Maharashtra and in Gujarat, the number of severely malnourished children rose from 3.90 per cent to 5.08 per cent in one year period.

Similarly other studies such as (Bhandari, 1981; Chakladar et al, 1984; Khalakdina and Phogat, 1982) found no improvement in the nutritional status of children although there was some decline in the incidence of severe malnutrition. Although there is evidence that supplementary nutrition has had a positive impact, several management related aspects point out many lapses and gaps.

Delivery of Service

The field experience show that supplementary nutrition, the costliest component in ICDS, was not being carried out properly (Nandi, 1991:65). Sunderlal (1988:25) also reported that most of the complaints against the AWW were on account of supplementary nutrition. The review of research suggests problems and gaps at almost all the operational levels ranging from the selection of beneficiaries to timely supply of supplementary food in the anganwadi centres.

Eligibility of Beneficiaries

One of the indicators to judge the utility of any service is whether it is reaching those who need it the most. However, many studies have found inappropriate beneficiary selection and shortfalls in coverage. According
to the CAG report (1990) the shortfalls in the coverage of women and children for provision of supplementary nutrition ranged from 6 to 80 per cent during 1984-89. In all the 55 projects, test checked in nine States, children and pregnant/lactating women had been provided supplementary nutrition irrespective of their health status or eligibility. The anganwadi workers (AWWs) had not conducted the periodic surveys for identifying beneficiaries. The same study also found that except in one, in none of the other projects severely malnourished children were provided the required therapeutic food. Even in the project where therapeutic food was provided the number of children covered was far less than the number of eligible children. However, there are studies which illustrate quite the opposite picture reporting much higher coverage as against the number of eligible children (Gupta and Manchanda, 1978). In any case, the beneficiaries were not necessarily eligible for supplementary nutrition. There was a tendency to distribute food to everyone who came to the AWC to maintain good relationships. As one study observed "The ICDS Programme has become a feeding rather than a nutrition programme. The AWW tries to fulfil the official quota and lack initiative to go out and find other malnourished children (CAG, 1990). Another report stated that the AWWs lacked training and knowledge of methods of early detection or prevention of malnutrition (Economic Times, 4 May 1992).

Another study found that in an urban ICDS Project, 90
per cent beneficiaries felt that their children did not benefit from supplementary nutrition (Paranjpe, 1984). The same study further observed that all the AWWs, ANWs and LHV s covered in the study felt that, health and nutrition education (HNE) was more useful than supplementary nutrition.

Norms

As mentioned elsewhere, ICDS has laid down norms regarding number of feeding days and the quantity of nutrients. Several studies have pointed out gaps in meeting these norms. Gopalan et al (1985) reported that the number of feeding days in the projects surveyed were less than the prescribed 300 days. The CAG (1990) reported that in most of the states surveyed the feeding days ranged from 28 to 284 days. The same study also found that every beneficiary was given food having less calorie and protein content than the prescribed norms. Some reports have pointed out that when locally available foods were used for feeding, the supplementation of calories and protein was inadequate.

The quality of food provided under ICDS has also come under attack in the newspapers. Besides quality, the monotony of the same food items and the taste have also been criticised by many studies.

Quality and Variety

The study conducted by CAG (1990) noticed that in all the projects under study, sub-standard and infested food was being provided. The same has been observed by many other
studies (Sharma, 1985). Among the reasons for infested food were inadequate and unhygienic storage facility in the anganwadi centre (WFP, 1986).

Supply

Interruptions in supply and short delivery of commodities including food, fuel, spices, oil etc are some of the problems in meeting the prescribed norms for providing supplementary nutrition. The CAG study (1990) observed frequent interruptions in supply of food in all their sample projects. The main reasons attributed to the delay were lack of timely transport contract, inadequate provision of funds, non-lifting and non-allotment of nutritional materials etc.

The findings discussed above suggest that the ICDS has had a positive impact on the nutritional status of the beneficiaries and the incidence of malnutrition has come down in the ICDS blocks. However, the review also suggests several shortfalls and irregularities in the selection of beneficiaries; number of feeding days and quality and supply of commodities. There are indications that the AWWs lacked skills and initiative to identify malnourished children. An important finding that the AWWs found HNF more useful for the people than supplementary nutrition underlines her own dissatisfaction with the intervention.
Health Component

Health is a prerequisite as well as an integral part of human development and any programme which aims to improve the quality of life of people cannot overlook its importance. One of the objectives of the ICDS is to enhance the child survival rate by improving the nutritional and health status of children and expectant nursing mothers through a package of services including health care. The health component of ICDS comprises of health check up, referral services, immunisation and health and nutrition education. The health check up of the beneficiaries include health care of children under six years of age, ante natal care of expectant mothers and post natal care of nursing mothers.

These health services are jointly implemented by the AWW and ANM (Auxiliary Nurse Midwife) and LHV (Lady Health Visitor) who are the field level functionaries of Primary Health Care.

Impact of Health Components: The important indicators to assess the impact of health components on the beneficiaries include mortality and morbidity indicators, utilisation of health care services and indicators of quality of life.

The review of research studies give only sketchy insight into the impact of ICDS on bringing down the morbidity and mortality rates. Most of the inferences are drawn from conducting before and after studies and in comparing ICDS and non-ICDS areas (Punhani and Mahajan,
Mortality Status: Almost half of the total deaths in ICDS blocks were of infants and of these 89% were during the neo-natal period. The major causes during neo-natal were tetanus, septicaemia, respiratory disorders, low birth weight and jaundice (Mandowara, 1985; Kamala, 1984) whereas post neonatal deaths were due to pneumonia, diarrhoea, gastroenteritis, malnutrition, measles, jaundice, cholera, and low birth weight (Mandowara, 1985; Kamala, 1984; Swami Saran, 1985; Aswath, 1984; Subrahmaniam, 1985). High IMR was due to lack of immunisation, ignorance and non-utilisation of referral services by mothers as they were reluctant to hospitalise their infants but inspite of this, the perinatal and infant mortality had decreased in ICDS blocks due to good antenatal care, referral of high risk pregnancy cases to hospitals, surveillance of morbidity in infants, etc (Kamala, 1984). However, another study found low IMR in the sample covered, but it was mainly due to poor reporting (Aswath, 1984).

Although IMR and child mortality rate continues to be high, research studies reported that there was decline in the mortality rate for 0-4 children covered by ICDS. In a multicentric study of CTC (1990), sex specific death rate of 0-4 years old children covered by ICDS were compared with SRS (Sample Registration System) estimates, and it was found to be 20.6 and 39.1 respectively for the year 1982-83. The
lower death rates were recorded for both males and females and rural and urban population.

Several other studies have reported that IMR was found to be much higher in the non ICDS areas as compared to the ICDS areas (Chhikara, 1982; Gupta 1982; Mehta, 1983; Jugal Kishore 1983; Sunder Lal, 1983; Thakur, 1984; Chandra, 1985; Tandon, 1983).

Morbidity Status: Unfortunately very few research studies have looked into the impact of ICDS on morbidity rate. However, studies indicate that although morbidity, like mortality, also continues to be high in poor settlements there was decline in the incidence of diseases.

The common diseases prevalent among children were malnutrition, diarrhoea, respiratory infections, skin infections, etc. A significant reduction in the percentage of children suffering from diarrhoea decreased from 26.7 to 7.5 over a period of one year during which ICDS programme was being implemented. The same study noted that AWW played a crucial role in disseminating knowledge about oral rehydration solution and in home based management practices of diarrhoea (Sunder Lal, 1985).

Although both IMR and morbidity are linked to several factors, the reduction in mortality and morbidity can be attributed to the impact of the ICDS package. This explanation gets further endorsed by a review of several other research studies which have used before and after
design. These studies have demonstrated that there was a substantial decline in IMR during the repeat survey after the programme has been in operation for 2 to 3 years (Sunder Lal, 1983; Khushwaha, 1983; Vidya Prakash, 1985; Desai, 1986; Kothari, 1986).

**Utilisation of Health Services:** Utilisation of services is another important impact indicator which may be responsible for better health status. The review of research reflects a significant difference between an ICDS and non-ICDS blocks in utilisation of health services, immunisation, antenatal services, deliveries by trained staff and intake of vitamin A, folic acid and iron tablets (Mehendale, 1982; Gupta and Srivastava, 1982; Sunder Lal, 1979; Tandon 1983; Bhandari and Mandowara, 1985). It was found that percentage of expectant and nursing mothers seeking health services improved considerably during the repeat surveys.

However, Khalagdin and Phogat (1982) found no significant difference in the health and nutrition status of children in an ICDS and non-ICDS block. In this regard, the study made the observation that "It was due to wrong distribution and sharing of supplements, poor diagnosis of ailments and inability to provide cognitive experience that the programme failed to produce any significant dent".

**Immunisation**

In India, many children can be saved from dying or from frequent illness by simply immunising them against the
six childhood diseases i.e. tuberculosis, diptheria, polio, whooping cough, tetanus and measles. Importance of immunisation in reducing child, especially infant, mortality and morbidity was recognised at the time of formulating the ICDS Scheme and it was made an essential part of the package.

The Service: Children are immunised in the anganwadi centre by the concerned Auxiliary Nurse Midwife (ANM). The AWW is expected to maintain the registers of all the new borns and pregnant women and ensure that all the enrolled beneficiaries are immunised on time. She has to motivate the mothers, inform and gather the beneficiaries for immunisations and liason with ANM and the Lady Health Visitor (LHV) for this purpose and together with them plan home visits and immunisation sessions.

Impact: Timely immunisation must bring down the incidence of mortality and morbidity caused by vaccine preventable six diseases in children. There are very few studies which have looked at the incidence of sickness and death due to vaccine preventable diseases. However, a number of studies have reported that a higher percentage of children were immunised in ICDS blocks than in non-ICDS blocks (Mehendale, 1982; Gupta and Srivastava, 1982; Khanna, 1985; Masood and Sinha, 1984; Subramaniam, 1985). The repeat surveys conducted also demonstrated increase in the percentage of children immunised over time during the implementation of ICDS.
Studies showed a definite improvement in the health status of the target population. For example, incidence of these diseases were definitely on the decline in the ICDS project areas as the immunisation status of children had significantly improved (Subrahmaniam, 1985; Santhanakrishan, 1985; Mandowara, 1985; Gupta, 1982; Tandon, 1981 & 1983).

On the other hand Adhish (1985) reported that the immunisation and nutritional level of children was found to be better in non-ICDS areas and as Prasad (1985), in his longitudinal study found no significant changes in the morbidity pattern amongst children in a repeat survey conducted after four years.

Immunisation Schedule

However, few studies also found the immunisation coverage as generally quite good for the first dose of vaccination but for subsequent dose the number of beneficiaries decreased (Punhani and Mahajan, 1989:110; Krishnamurthy and Nadkarni 1983). Patel and Udani (1982) found that almost two third children dropped out during the third dose of polio and DTP. Khanna (1985) found that only 52 per cent mothers adhered to the immunisation schedule. Many AWWs also had only fair to poor knowledge about the immunisation schedule. Kanthimathi (1989:116) also reported that most mothers lacked information regarding the severity of vaccine preventable diseases and methods of preventing them by immunisation. About 90 per cent mothers were aware of primary dose but only 50 per cent knew about the booster
dose (Punhani and Mahajan, 1989:110). The reasons for non-adherence was ignorance, lack of knowledge about the schedule, indifferent attitude, non-availability of vaccines, fear of side effects, inconvenient timings, etc.

Immunising pregnant women against tetanus toxide is part of the immunisation programme. The existing studies report that immunisation coverage of expectant mothers against tetanus has improved. Deb and Arora (1982) and Sunder Lal (1981) observed that 78 per cent and 47 per cent expectant mothers were immunised against tetanus in ICDS and non-ICDS blocks respectively. Gupta and Manchanda (1978) reported that the coverage of expectant mothers was better in rural areas than in the urban slums. Studies have found that the literacy level is a significant factor in making immunisation a success (Minhas, 1991).

Constraints: Several research studies have revealed that functionaries faced many problems while implementing the immunisation programme such as irregular supply of vaccine, lack of transport, defective refrigeration because of frequent load shedding, etc. However, Khanna (1985) found that in spite of all the constraints, the records maintained by the AWW were complete.

The review of the impact of health components of ICDS on the target group showed that the situation regarding infant mortality and morbidity, immunisation coverage, utilisation of health services, had improved and that
generally ICDS blocks demonstrated better performance on these aspects than the non-ICDS blocks. However, the review also point out that the situation had only improved in relative terms otherwise it was far from being satisfactory. One reason could be low literacy rates in poor areas. As the NSS data (Minhas, 1991) showed access to (or benefits from) basic health and family planning services was highly skewed against the illiterate families. For example, only 11 per cent of the children of illiterate households took triple antigen vaccines (part of free public services) compared to 50 per cent of children belonging to the group of parents who had only primary education.

The AWW was expected to some what compensate for the low literacy levels with stress on health and nutrition education. It appears, she lacked skills for performing her role in this respect.

Non-Formal Pre-School Education

Ironically, while formulating the integrated child care service scheme the need for promoting psycho-social development of children was completely overlooked. In the initial stages of discussions, the scheme covered only the physical and medical aspects of child development. It was at the instance and perseverance of the Indian Association for Pre School Education (IAPE) that finally when the scheme was launched, it had a component on non-formal pre-school education (PSE) for 3-6 years old children. However, even
after more than two decades of the ICDS, pre-school education component has still remained as secondary and the main focus has continued to be on health and nutrition aspects. Thus, in course of time, the anganwadies have been reduced to just feeding centres with some notional and mechanical activities such as songs, rhymes, etc. - thrown in primarily to please the visitors (Murlidharan, 1991:45-46)

It took several years before any system to monitor the PSE component was set up. It was only in 1985 that a cell to monitor and evaluate PSE component was set up in the National Institute of Public Cooperation and Child Development. The research studies conducted on the impact of PSE on children are recent and few (Punhani and Mahajan, 1989).

Impact: The impact of PSE has been studied in terms of development and behaviour of children attending anganwadies. The major finding of research studies in this respect show that, in comparison with non-ICDS children, children attending anganwadies scored higher in language and cognitive development (Khosla, 1985) and performed better in classes I and II (Sood, 1986). In about 56 per cent and 82.2 per cent anganwadies of the urban and rural blocks respectively, children came only at the time of feeding or a little earlier. Those who stayed back upto feeding time and stayed throughout the programme were mainly from those anganwadi centres which were rated to have satisfactory implementation of pre-school programme. However, only in 26 to 30 per cent anganwadies children looked happy, involved
and absorbed in the programme (Sharma, Bano and Mistry, 1986).

There was a significant positive relationship between the AWW's competence and the cognitive scores of children especially in the 4-5 age groups (Pandey, 1988).

In five in-depth studies which were conducted to assess the quality of services and its effect on psycho-social and cognitive development of children in high ranking and low ranking anganwadies and in the non-ICDS areas, the noteworthy finding was that the performance of children was certainly better in ICDS areas than those from the non-ICDS areas, and between the children of high ranking AWCs and non-ICDS areas whereas this was not true of low ranking anganwadies. The study concluded that "mere exposure to the AWC is not so important, it is the quality of the experience that counts and has to be of a certain minimum level to benefit children". The study recommended, "there is a need for providing minimum material at the anganwadi, strengthening skills of the workers through training and for adequate supervision so that the environment of anganwadies can become stimulating for learning" (Sharma, 1986).

Constraints: The AWW faced problems in terms of availability of basic services and space, both inside and outside the anganwadi. This problem was more acutely felt in urban areas. Lack of space excluded any outdoor games (Khosla, 1985). Most of the anganwadies lacked seriously in
providing basic services such as drinking water and toilets (Murlidharan, 1991).

Health and Nutrition Education (HNE)

Health and nutrition education is a tool to enhance the level of awareness of individuals and thereby bringing change in their behaviour for the protection and promotion of their health and well being. In ICDS, HNE is an integral part of the package and is imparted to expectant and nursing mothers and women in the age group 15-44 years by the AWWs, ANMs and Medical Officers. The objective of this component is to enhance the awareness of a mother regarding her child's needs and to build her capabilities to look after him/her within the family environment.

Success of health and nutrition related component in the package largely depends on the success of HNE. However, whereas it is relatively easy to monitor and evaluate aspects which are data based, HNE which aims to bring about attitudinal changes is difficult to measure and evaluate. There have been few studies in this aspect which helps in understanding its impact.

Impact of the HNE

A detailed evaluation of ICDS by a review team of WEP, WHO and UNICEF found that the AWWs were not sufficiently trained; they themselves had inadequate knowledge regarding weaning foods, significance of breast feeding, etc.; there were inadequate and inappropriate educational materials and
there was hardly any referral source which AWW could seek advice and guidance (Ghosh, 1991:40). Indira Bai (1989) and Seshadri and Gopaldas (1986) also found that the AWWs were not well equipped in terms of appropriate aids, materials, content and teaching modules to handle HNE effectively.

Several studies have observed shortfalls in the time spent on this activity by AWW and her lack of motivation in this regard. Seshadri and Gopaldas (1986) found that AWW spent less than 10 per cent time on HNE. An evaluation done by NIPCCD (1989) showed that the frequency of conducting HNE sessions was found to be once in three to nine months and the content was of very limited nature. To a large extent, efficient handling of HNE component depends on the attitude of the AWW and how much importance she attributes to it. Sunder Lal (1978) found that only 15 per cent AWWs were imparting HNE with enthusiasm while others had average or indifferent attitude towards it. The indifferent attitude of AWW was once again corroborated in a study by Pramila etal (1987). She stated that tremendous efforts were required to motivate AWW to organise systematic session of HNE. Weak implementation of HNE was also reflected in the inability of the mothers to connect immunisation and supplementary nutrition directly with child development (Krishnamurthy and Nadkarni, 1983). The AWWs' lack of motivation to impart HNE could be because of her lack of skills and work load. Several studies have pointed out the inadequate training of AWWs in this respect (Sunder Lal, 1978; Vasudeva, 1979;
Seshadri and Gopaldas, 1986). Studies have reported that almost 4-5 hours a day of AWWs' time is taken away by feeding and pre-school. Other activities can be taken up only by cutting time on these two priority areas of ICDS (CAG, 1990:154). So even though the AWWs, as reported before, perceived HNE more important than feeding they were unable to do justice to it.

While these several studies found HNE weak and unsatisfactory, there is empirical evidence to support that HNE has the potential to bring about change in awareness and attitude of mothers. Some studies have observed that the mothers who received HNE showed significant improvement in their knowledge, attitude and practices regarding infant feeding, deficiency diseases, hygiene and sanitation as compared to the mothers who did not receive HNE (Begum and Malathi, 1986). Another study found perceptible attitudinal change among the mothers with increasing willingness to allow infant to be weighed and immunised and also visit the health centres for ailments. They also showed tendency to wash hands after defecation and use soap to bath despite poor water facilities (Govt. of Maharashtra, 1990).

The potential of HNE in sustainable development has not been recognised by the researchers but also by the AWWs themselves, yet it continues to remain a neglected area. The role of AWW in implementing HNE is crucial. The success of it largely depends on her ability to communicate, her
initiative in making these sessions interesting and relevant and her motivation to follow up to monitor its impact on the target group. However, the review clearly indicates that the AWW not only lacked time but also appropriate skills and motivation to implement HNE.

Community Participation

ICDS seek community participation in its implementation process and promotes utilisation of local resources. The scheme aims to build the capacity of the mothers to promote development of their children thus instilling self-help motives among them. For ensuring effective community participation, it is necessary that the community has awareness regarding the objectives of the scheme, its services and mode of implementation. However, once that happens the community can themselves monitor the programme and ensure effective delivery of services.

The review of limited research studies in this regard show that the level of community participation was low or poor in most of the ICDS blocks (Punhani and Mahajan, 1989). In the research available, community participation has been mostly assessed by the knowledge of the beneficiaries about the ICDS, their perceptions and extent of participation in the programme. Most of the studies show that beneficiaries displayed low awareness of the scheme, its components and possible benefits they could derive from it (Sharma, 1987; Jacob, 1986; Narayan, 1986).
Sharma and Chand (1984) found that the awareness of women beneficiaries was highest for supplementary nutrition followed by pre-school education and immunisation. In another study only 4 per cent beneficiaries could link the scheme with child welfare and only 9 per cent knew that women were also among the beneficiaries group. They had limited knowledge about the functionaries of the scheme and the role played by them (Sharma, 1986). Interestingly, in rural areas, awareness about the scheme and participation of beneficiaries was found to be higher than in the urban areas (Paranjpe and Bhagwat, 1984; Sharma and Chand, 1984). Most studies observed that both participation and involvement of the community confined only to the utilisation of services (Paranjpe and Bhagwat, 1984; Ramdev and Bindiya Lal, 1982; Sharma, 1987).

**Constraints:** A majority of ICDS functionaries themselves were unable to perceive the importance of community participation and there was also difference between the beneficiaries and the functionaries' perception of benefits and objectives of the services (Rajesh Kumar et al., 1984; Sharma and Chand, 1984; Sharma, 1986).

The ICDS functionaries felt that low level of community participation was because of lack of awareness and knowledge of ICDS scheme, ignorance, poverty, lack of time on the part of the target group, inadequate training of AWWs, etc (Ramdev and Bindiya Lal, 1982). Skills of the AWWs are crucial in
eliciting community participation but most studies pointed to their lack of skills in this respect. The anganwadi workers' attitude towards community participation is dependent on her perception of the programme. Goriawalla (1986) found that most AWW saw ICDS as a service to people rather than people's development programme and they saw themselves as social workers. Besides lack of skills and attitudes, there was lack of clarity about the concept of community participation (Punhani and Mahajan, 1989).

From the review, it appears that community participation has remained the weakest link in ICDS programme. It has been neglected by all those concerned with implementation, monitoring, evaluation, training and research. Absence of efforts in this direction has led the functionaries as well as the beneficiaries to believe that the ICDS is service and welfare oriented rather than a development oriented programme.

Anganwadi Worker: Crucial Factor in ICDS

The functional link between all the services in the ICDS package and the target group is the AWW. She is responsible for planning, organising, and executing all the services at the field level and extending them to the target group. Her role is therefore crucial in the ICDS scheme and the success or failure of the scheme to a large extent, depends on her abilities, interest and motivation.
Training

Training plays an important role to prepare AWWs to perform their jobs effectively. To begin with, a four months induction training was envisaged for AWWs but subsequently the duration was reduced to three months as the component of functional literacy was delinked from ICDS in 1985 (Sunder Lal, 1988). Despite the fact that training of ICDS functionaries especially of AWWs, has drawn a great deal of attention, it has still remained a weak spot (Murlidharan, 1991:50). Several studies have pointed out that the AWWs lacked in skills appropriate to job functions (Sunder Lal, 1988; Murlidharan, 1991; Sharma, 1986; Seshadri and Gopaldas, 1986; Ramdev, 1982). Many studies have pointed out that the training was mostly knowledge based; imparted in the traditional class room style and lacked imagination. The problem with regards to training has been to be found two fold - one, inadequacy of trainers - they were themselves ill equipped and therefore incapable of imparting need-based training. Second, the curriculum was too structured at the centre and left no room for flexibility and innovation (Murlidharan, 1991:50).

Reviews suggest that the training function has so far failed to develop capability of the AWW to function as catalyst or a change agent - her role as envisaged in the programme.

There are hardly any studies focusing on the AWW. Most of the available studies have tried to assess the knowledge
of AWW about the programme and its services. The review of these studies reveal that the criteria for selecting an AWW was more or less followed. Gupta et al. (1978) found that all the AWWs were in the age group 18-45 years; the majority of AWWs was secondary educated and above; nearly 77 per cent AWW were from the same community and nearly 64 per cent AWWs resided in the same project area as envisaged in the criteria for selecting AWWs.

Knowledge: Several studies found serious gaps in the knowledge of AWWs regarding the various components of the scheme. Kant et al. (1984) in a study found that only 22 per cent AWWs knew about the immunisation schedule; only 16 per cent knew the importance of colostrum for new born baby and none could tell the composition of oral rehydration solution. Indira Bai (1989) found that the AWW had satisfactory knowledge about infant feeding, nutrition and detection and prevention of some common diseases but only a few knew about BCG and polio vaccine and many could not weigh a child. Yet another study found that despite AWW's good performance with regard to training and written examination, the community they served had poor knowledge about health and nutrition components (Udani, 1983). However, the most distressing finding by Kant et al. (1984) was that nearly 93 per cent AWW could not even tell the full form of ICDS; 91 per cent could not enumerate all the services being provided under the scheme and none could list out their job responsibilities.
Time-Allocation: The scrutiny of the time spent by an AWW on the various components of the scheme revealed that she spent as much as 60 per cent of her time on education, 17 per cent on health and 8 per cent on nutrition (Planning Commission, 1977) whereas some other studies point out that the AWWs were spending nearly 30 per cent of their time in filling the registers and records (Nair, 1989:408).

Performance: While Sharma (1986) found that educational level and training were positively related to the performance of AWW, Goriawala (1986) found that although the AWWs had high knowledge of the scheme and adequate skills their performance level was low (Goriawala, 1986). The study further elaborated "motivation was an important factor affecting performance than knowledge. Their (AWW) performance was low because of low motivation which was due to dissatisfaction with their jobs". The study further found that nearly 55 per cent of AWWs felt that they were the most important people in the ICDS programme but nearly 38 per cent felt that they were of no importance at all and believed that the success of ICDS depended on the CDPO, supervisor and the health staff. A considerable percent of AWW showed dissatisfaction with the job and said that they would leave the job if they got something better. Some studies have also found that low honorarium and absence of job security were some related causes for dissatisfaction with the job (Gupta, 1978).
Summary

The ICDS scheme initiated in 1975 as a pilot project is now the most important and comprehensive programme for children in India. Over the years, it has received lot of attention from policy makers and planners and has managed to arouse the curiosity of many researchers and academicians. However, for a programme of the size, magnitude and importance such as this the research was rather limited and fragmented. The focus has been largely on the individual services and their impact on the target group. The coverage of the studies has been often of very micro nature.

The foregoing review of the existing research indicates that the ICDS has positively benefited the target groups. There was some evidence that as compared to the non-ICDS areas, the ICDS areas have shown better performance on major indicators such as infant mortality and morbidity, school enrolment, nutritional status, immunisation coverage and utilisation of services. However, the reviews clearly suggested that, the improvement was of relative nature and the overall situation was still far from satisfactory.

The weakest links, as shown by review were HME and community participation, the two most vital components for building capacity and self reliance in people. To implement both these components, the workers needed to have specific skills, initiative and motivation. However, lack of training and clarity of concepts regarding community participation at all levels has led the AWWs, and in turn the beneficiaries
to believe that the ICDS is a service delivery programme and not a human resource development effort. The functionaries seemed to rely on their skills to deliver or to dole out services such as distributing food, etc. Ironically the otherwise well structured monitoring system has also not paid due attention to these two crucial components of the Programme. In the review, it repeatedly came out that the functionaries lacked skills appropriate for their jobs. It appears that the training of AWWs has failed to equip them for performing their role of change agents, as envisaged in the programme. The studies also showed lack of motivation and enthusiasm among the AWWs for conducting HNE and other educational and human resource development activities.

However, in spite of repeated emergence of these factors, the focus of research has continued to be on individual services and their impact. The research has concentrated on the system factors responsible for slow or no improvement but has almost completely overlooked the most crucial factor - the AWW herself.

Despite the fact that the AWW was the most important functionary who was single-handedly responsible for making ICDS a reality in the field, the researchers have not tried to understand her motivation, needs and aspirations.

The limited research on AWW has largely confined itself to analysing her knowledge content or her work load. None have made an attempt to see what motivates her to work
or not to work. What endogenous factors, keeping the exogenous factors constant, bring out the difference in performance? What influence these endogenous and exogenous factors which affect her field behaviour? The present research attempts to study some motivational aspects in the functioning and performance of AWWs.