Chapter – 6
Study in Retrospect and Conclusions

The present study – a critical analysis of the problems and prospects of integrated child development services (ICDS) scheme on women and children in Kottayam district - has been carried out with the following hypotheses and objectives in mind:

6.1 Hypotheses

1. ICDS group of children will show better intellectual development than non-ICDS group of children.
2. School dropout rates in the ICDS areas will be less than that of the non-ICDS areas.
3. The pre-school education programme under ICDS would help to create a better acceptance of the parents for further education of their children.
4. Women in ICDS areas will have better awareness of nutrition and health problems of children as against women belonging to non-ICDS areas.
5. The efficacy of the ICDS delivery system is a major determinant of the impact it can produce on the beneficiaries.

6.2 Objectives

The objectives of the study are:

1. To find out to what extent the Pre-school Education Programme of ICDS will accelerate intellectual development of children in the ICDS areas;
2. To assess the impact of Pre-school Education in the reduction of school dropout rates, enrolment in further education and retention of children in the ICDS areas;

3. To examine the impact of the Nutrition and Health Education components of ICDS on the women population in the ICDS area (between 15 to 45 years) in terms of enhancement of their knowledge in the critical health care areas - immunisation, nutritional care of children, prevention of nutritional deficiency diseases, environmental sanitation and personal hygiene - and on the extent to which the beneficiaries put this knowledge into practice;

4. To assess the efficacy of the ICDS delivery system impacts on the outcomes of the projects especially in respect of nutrition and health education, in the selected project areas;

5. To bring out to what extent the scheme helps in addressing the Gandhian concept of a welfare society (Sarvodaya); and

6. To identify the drawbacks in the implementation of the project.

6.3 Methodology

The methodology used for the study is also summarised below:

The study basically has been designed using the comparison of empirical data collected from three ICDS Blocks and three equivalent non-ICDS Blocks.

As many as 150 children from the ICDS areas were compared with 150 children from the non-ICDS area to assess the impact of pre-school education on intellectual development. A total of 800 women from ICDS and 600 women
from the non-ICDS were drawn for comparison for the Health and Nutrition Education component.

The study also collected data from ICDS functionaries listed below:

1. Child Development Project Officers : 3
2. Supervisors : 14
3. Anganwadi Workers : 50
4. Village Leaders : 100

The data were collected using the tools stated below:

A. Interview Schedules

1. Interview schedule for mothers/women (N = 600) from both ICDS and non-ICDS areas.
2. Schedule for middle level ICDS functionaries namely CDPO, Supervisor and Anganwadi Worker (N = 67) from ICDS area.
3. Observation Schedule for Anganwadis (N = 50, ICDS only)
4. Interview Schedule for Village Leaders (N = 100, ICDS only)

B. Intelligence Test

Ravens Progressive Matrices Test was used for measuring intellectual development of children in the two contrasted groups.

C. School dropout rates, enrolment for further education and retention

The above details were studied with the help of secondary data collected from school records.
Available reports, records, guidelines and other documents were used as additional sources of information. The data collected were finally processed and analysed to find out answers to the questions posed as objectives of the study.

Comparison of means was need using appropriate statistical tests. To find out the statistical significance of the difference between means of the two groups, 't' test for large independent samples was used. The following formula was used for calculating t - value.

\[ t = \frac{M_1 - M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}} \]

Also, the comparison of proportions was done using the following formula:

\[ t = \frac{p_1 - p_2}{\sqrt{\frac{p_1q_1}{n_1} + \frac{p_2q_2}{n_2}}} \]

6.4 Conclusion

The study helps to establish the fact that the ICDS programme succeeds in attaining the goals set for it. In the components of the programmes help to achieve the total effect expected of the Integrated Child Development Services Scheme. The detailed findings are reported below:
Impact of Pre-school Education Programme of ICDS on Intellectual Development of Children of ICDS areas

1. The study shows that there is significant difference in the intellectual abilities of the children who have received PSE, compared to those in non-ICDS villages who did not have access to the PSE. The former group was found to have significantly higher intellectual abilities, against the non-ICDS group of children. This fact clearly highlights the useful role that pre-school education can play in stimulating intellectual development.

Impact of pre-school education programme on dropout rates, enrolment in further education and retention in the schools

The study shows that the ICDS programme through its component – namely, pre-school education has helped to reduce school dropout rates in the areas covered by the study. Also it has facilitated the enrolment of children in primary schools in the select areas and retention in further education.

Impact of Nutrition and Health Education Programme on health awareness and health practices of women of the ICDS areas

The study reveals that the ICDS programmes has exerted a strong influence on the health awareness of women in the age group of 15 to 45 years, including nutritional practices.
The following findings substantiate this argument:

1. As can be seen from the fact that ninety three percent of the pregnant women in the ICDS samples took proper medical check up during their pregnancy as against 49.4 per cent women in the non-ICDS areas. Similarly referral facilities were utilised by 88 per cent pregnant mothers in ICDS areas as against 57.1 per cent in the non-ICDS areas.

2. The analysis shows that women in ICDS areas make use of health check up and nutritional health education facilities more than that of the women of the same age group in non-ICDS areas. In ICDS areas, 93 per cent and 93.4 per cent women respectively were utilising the above services. Whereas in non-ICDS areas only 51 per cent and 12.70 per cent women respectively were utilising the said services.

3. It is interesting to note that more number of expectant mothers in ICDS areas were utilising services of health check-up (93.3 per cent), immunisation (92.6 per cent) and NHE (85 per cent). In non-ICDS areas, the health services provided by PHCs/Sub-centres were being utilised by health check up (49.4 per cent), immunisation (58 per cent) and NHE (46 per cent) expectant mothers. The differences in ICDS and non-ICDS samples were significant pointing to the effective role played by ICDS in mobilising the health system in making health services available at the door steps of the beneficiaries.

4. The percentage of children immunised for BCG, measles, polio and DPT was found to be significantly higher in ICDS areas as compared to non-ICDS areas (ICDS – 92.3 per cent; non-ICDS – 59 per cent).
5. Another beneficial health practice used for comparing the ICDS and non-ICDS nursing mothers were the introduction of semi-solids to infants. Eighty one percent nursing mothers in ICDS areas as against 55 per cent in non-ICDS areas had introduced semi-solids to their infants. The proportion is significant and it reflects the better level of awareness of the ICDS mothers due to the impact of regular NHE in promoting positive feeding practices.

6. The nutritional status of children in ICDS areas based on growth monitoring was much better than that of children in non-ICDS areas. The percentage of normal children was 61.67 per cent in ICDS areas and 33.63 per cent in non-ICDS areas. Non-ICDS areas also recorded over four percent more children in Grade-III and Grade-IV malnutrition as compared to ICDS areas (ICDS – 3.7 per cent; non-ICDS – 8 per cent).

7. As many as 83.3 per cent of expectant mothers in the ICDS areas took tetanus toxoid vaccine against 58.9 per cent women in non-ICDS areas.

8. Higher percentage of babies had low birth weight in non-ICDS areas as compared to ICDS areas (ICDS – 34.90 per cent; non-ICDS – 53.97 per cent).

9. The study revealed that significantly higher percentage (93.3 per cent) women in the ICDS samples took proper medical check up, as against (49.4 per cent) non-ICDS samples.

Suggested improvements for the ICDS scheme, suggested by the study

The study points to the need for improvement in the functioning of the ICDS programmes in the areas such as - physical set up of AWs, staff position,
training status profile, role and job responsibilities of functionaries, co-
ordination and community participation. The findings under this head are
presented below:

1. Sixty four per cent of the AWs did not have minimal toilet facilities. Also
61 per cent of the Anganwadis did not have separate storage space for
ration. Again only 50 per cent of them had sufficient space for recreational
activities.

2. Whenever AWs were located in areas predominantly inhabited by upper
 caste population, it restricted and hindered the utilisation of the Anganwadi
services by the lower castes and poor beneficiaries due to mental diffidence.

3. The staff position and training status of functionaries was found to be
inadequate; for example, out of the 25 posts of supervisors only 14 are in
position. Such deficiencies need to be corrected.

4. Analysis of qualifications of AWWs indicated that educated women are
attracted to the scheme. This is a welcome trend which needs to be fully
utilised in the working of ICDS projects. This can be done by fixing better
qualifications for the post.

5. The study throws light on the fact that the CDPOs were not able to perform
their supportive and guiding role effectively. They function more as
supervising agencies or the officials function more as inspectors and
administrative officials than as change agents. The training syllabus of
CDPOs need to be changed drastically so that it will equip the workers with
the skills to provide the correct form of continuing education to AWWs.

6. Supervisors in the study were found to have more than 35 AWs under their
charge. It is too large a number to be effectively controlled; the number
needs to be decreased to provide guidance and support to the functionaries at the grassroots level in a participatory way during their visits to AWs.

7. Though co-ordination with health functionaries was reported to be satisfactory by a majority of CDPOs, participation of ANMs in referral services, health check-up, home visits and in NHE was found to be marginal. This needs to be corrected.

8. Functionaries at all levels reported that irregular supply of food, equipment, material and medicine kits is a major problem in implementation of ICDS. The efficiency of the administrative machinery concerned needs to be improved to correct these shortcomings at the earliest.

Tenability of the hypotheses

The hypotheses are mostly substantiated. The details are given below:

1. The first hypothesis - ICDS children will show better intellectual development than non-ICDS group of children during the period of operation of the programme – is found true since the intellectual ability of ICDS children is seen superior to that of children of the same age group from the non-ICDS group.

2. The second hypothesis - school dropout rates in the ICDS area will be less than that of the non-ICDS area – is substantiated since there is lesser percentage children dropped out before Standard V in the ICDS area, than the non-ICDS area.

3. The third hypothesis – the pre-school education programme under ICDS would help to create a better acceptance of the parents for further education of their children – is defended since more number of children in the ICDS
areas as against children of the same age group in the non-ICDS areas have enrolled for further education in the schools.

4. The fourth hypothesis - women in ICDS area will have better awareness of nutrition and health problems of children as against women of non-ICDS areas – is validated since the study shows that ICDS women have superior knowledge and practical health awareness on nutritional health problems od children to women of non-ICDS areas.

5. The fifth hypothesis - The efficacy of the ICDS delivery system has a determining influence on the impact of the system – is tenable since the draw backs in the delivery system has affected the efficiency of the scheme implementation in the select areas.