Chapter Three

Methodology
CHAPTER-III

Methodology

The present research endeavour has been made in line with the study design given in the following pages of this chapter.

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3.1. Statement of the problem

MCH care is not simply a form of service organised conveniently according to age and sex characteristics or a specific activity to deal with a disease. MCH care is rather concerned with the process of growth and development, the foundation of human life—and it is the very nature of this process which is crucial for health and ill health, throughout the life cycle.

The achievement of full potential at each stage of growth and development largely depends on the preceding stages and is a critical determinant of the next. If physiological and psychosocial requirements are not fulfilled at each stage, the physical and mental potential of the individual to adopt and develop in a healthy way diminishes. The health of the child subsequently influences his or her health as an adult and the health of the adult influences the care of his or her child(ren). Thus the growth and development of one generation affect the next generation. Mother and children are considered vulnerable groups because of the special characteristic of pregnancy, infancy and young age that expose them to the risk of ill health.

The vulnerability of mothers and children has traditionally been well understood in all cultures, but provision of services through health planning
received very little emphasis until very recently, especially in the developing countries. Even after the realisation of the importance for strengthening MCH services, attempts to deal with the huge and complex problems were made by means of imposed and often in appropriate services and ill-adjusted methods.

The MCH problems cover a broad spectrum, at one end of which are the most advanced countries with prenatal problems, congenital malformations, genetic disorders and behavioural problems; at the other extreme of the spectrum are the developing countries with a concern to reduce maternal and child morbidity and mortality, spacing of pregnancy and limitation of family size, prevention of communicable diseases, improvement of nutrition and promotion of acceptance of scientific health practices.

Participatory approaches, as has been seen through the studies reviewed in the previous chapter, go a long way in ensuring that the people realize their own roles in respect of what has been mentioned in the above paragraph.

Thus the present study was undertaken to promote participatory approaches through a PRA menu* and compare the effectiveness with the communication methods generally followed in the delivery of MCH programmes in India.

* The researcher himself had got trained in PRA as a master trainer at Gandhigram University, three years prior to undertaking this research.
3.2. Title of the study

The present study, in line with the thrust of the statement made above, makes an attempt to understand the efficacy of participatory methods with its focus on putting the people first in conducting the MCH programmes in a more meaningful way by involving the community at every stage. The precise title of the present study is:

"Reach and effectiveness of participatory approach in Maternal and Child Health programmes under Tamilnadu Integrated Nutrition Project".

3.3. Objectives of the study

1. To assess the effectiveness of communication methods in MCH programmes.
2. To understand the present role of parents in child health programmes.
3. To try out and evaluate the effectiveness of participatory methods in MCH programmes.
4. To develop supports at the community and administrative level for furthering the MCH programmes in the direction of increased participation.
3.4 Area of the study

Dindigul District was chosen as universe of the study; two blocks namely Dindigul and Athoor were pinned down for the study. Two Community Nutrition centres in each of the selected blocks were identified on the basis of Ceteris Paribus concept i.e. comparability with respect to: (i) size of the community, (ii) civic facilities available in the community, (iii) transportation and communicability from the block head quarters, (iv) caste composition. Usual communication methods were employed in one set of CNCs (one centre from each selected block) and the participatory techniques in another set of CNCs (one centre from each selected block). Incidentally at the time of the selection of centres the Government of Tamilnadu had announced 'Namakku Naame Thittam' with a specific intention of institutionalizing the concept of peoples participation in local planning and execution of the development programmes in a continuous and sustainable basis. So, the researcher was tempted to add one more set of CNCs (one centre from each selected block) where the Namakku Naame Thittam had been introduced.

* Because the TINP centre personnel in these blocks had been on an earlier occasion trained in using PRA methods.

** The Tamil expression “Namakku Naame” literally translates itself as “We for Ourselves” – The expression for promoting peoples participation in development action. See Appendix IV for details about the programme.
3.5 The study villages

As per the method described above the following six centres were selected for the present study.

1. AC, Village
2. AQ Village
3. NC, Village
4. NC$_2$ Village
5. NNC, Village
6. NNC$_2$ Village

The abbreviations mentioned for each village bear the following connotations:

(i) AC refers to "Action Centres" (TTNP centres) in which PRA approach was experimented upon,

(ii) NC refers to "Normal Centres" (TXNP centres) in which regular communication techniques were adopted.

(iii) NNC refers to "Namakku Naame Centres" (TINP centres). Those normal centres where community participation is slightly high were chosen by the State Government to introduce Namakku Naame Thittam.

*** These Pseudonymous abbreviations for the selected TINP centres (CNCs) have been adopted as a part of standard practice in Social Research.
1. ACi Village is located at a distance of 14 kilometers on the western side of Dindigul. The village has a total of 296 households with a population of 1506. The village possesses primary school, health sub-centre, post office, community hall, community radio, community television, over-head tank, bore well, ration shop and co-operative bank. Every one hour town bus facilities are available.

2. AC2 Village is located at a distance of 9 kilometers on the Northern side of Dindigul. The village has a total of 297 households with a population of 1585. The village possesses community hall, community television, over-head tank, three hand pumps and primary school. Every 30 minutes bus facilities are available in a distance of one kilometer.

3. NC1 village is located at a distance of 17 kilometers on the South East side of Dindigul. The village has a total of 315 house holds with a population of 1591. The village possesses post office, community television, over-head tank, two hand pumps, primary school, co-operative society and a ration shop. Every one hour bus facilities are available.

4. NC2 village is located at a distance of 7 kilometers on the Eastern side of Dindigul. The village has a total of 245 households with a population of 1021. The village possesses community television, primary school, over-
head tank and five hand pumps. Every 20 minutes bus facilities are available with a distance of two kilometers.

5. NNCi village is located at a distance of 10 kilometers on the South West side of Dindigul. The village has a total of 383 households with a population of 1769. The village possesses community television, community radio, over-head tank, six hand pumps, elementary school, middle school and ration shop. Every 30 minutes bus facilities are available with a distance of 1.5 kilometers.

6. NNC2 Village is located at a distance of 6 kilometers on the South East side of Dindigul. The village has total of 365 households with a population of 1685. The village possesses community television, community radio, elementary school, over-head tank and six hand pumps. Every one hour bus facilities are available.

3.5.1 Respondents In the study

The respondents in this study were chosen uniformly in all the six centres. All the Ante-Natal and Post-Natal mothers and Children in the age group of 0-36 months were taken as respondents for the purpose of analysing the indicators and to find out the impact of the programme.

For the purpose of KAP analysis purposive sampling method was adopted. Ante-natal mothers from maternal health survey and mothers having
12-24 months age group children were taken up as respondents for child health survey in this study.

3.5.2 Sources of data

3.5.2=1 PRA methods*

(a). Social mapping

To see an overview of the entire community with its resources. This is a very versatile exercise which can be used to find out population, total ANC and PNC mothers, total targeted children, total beneficiary children, identification of severely malnourished children, representation of community group members, adoption of small family norms, drinking water facility and drainage system.

(b). Venn diagram

This exercise is used to locate the power structure in the community particularly those who influence or can influence their actions. This exercise is also used to find out which community institutions need to be built up for more efficient services. This also helps to analyse the facilities available in the village and the relationship between the community and government functionaries like VAO, RWO, AAO, CWO, CNW, VHN, Teachers etc.

* 'Volunteers' were trained from about ten TIPN centres under a five day module in participatory methodology.
(c). Seasonal Analysis

Wherein the seasonality of rainfall, agriculture, festivals, diseases, vegetable cultivation and harvest, milk production etc. are studied by encouraging the community to visualize this in simple ways. This method helps to know / realise about the season wise crop pattern, food grains availability, vegetables, milk production, occurrence of diseases etc.

(d). Trend analysis

This exercise helps to find out, how various changes have taken place in health, agriculture, MCH practices, livelihood etc.; to understand the adaptive changes that have taken place over the years. This method also helps to know about age at marriage, food habits during pregnancy, delivery system, breast feeding practices, practice on supplementary food to children etc.

(e). Problem analysis

This exercise helps to identify the needs of the community and to prioritise. On the basis of prioritization community itself plan and implement to achieve their needs. Community itself monitor their health and nutrition activities by way of forming village level monitoring committee.
3.5.2.2 **KAP study**

The data complied in the KAP study is primary in nature, collected through the use of pretested questionnaire. Two different types of questionnaire were prepared-for maternal health and child health separately. In each questionnaire seven education and intervention activities earned out by the TEMP were selected after careful discussions and the questions were framed to find out the mothers knowledge, attitude and practice level of each activities and used after pre-testing by the PRA team.

The questionnaire used for KAP analysis has been given in the Appendix. II.

3.5.23. Mother and Child health Indicators

The indicators used in TINP for the purpose of monitoring the project activities have been used as the major source of data for analysis and comparison in this study. The indicators which are influenced by the communication process are taken together for analysing the effectiveness of the MCH programme in all the six centres. All the 10 indicators related to maternal health and 15 indicators related to child health were included and data were collected from the TINP centres.

* For this study purpose a PRA team consisting of trained voluntary members at various levels of staff working in TINP were formed with the guidance of the researcher, (see page 111)
3.6. Operational definitions

a. Village Level Monitoring CoimmSufée (VLMC)

In the course of PRA meetings the participating community members realized the need for creating their own body of representatives to oversee that the programme would go on satisfactorily. Thus the idea of village level monitoring committee was born. The VLMC was expected to help, guide, support, analyse the MCH activities besides monitoring. A nine member committee consisting of four male members and five female members was formed. This committee was meant to assist in the smooth functioning of the CNC and also to help in building maintenance. One or two members would visit the centre regularly to ascertain the quality of food supplied and to ensure cleanliness of the centre. The VLMC as a whole would meet every month and discuss about the activities carried out in the centre and support the staff if required.

b. Participatory Cooking Demonstration

The women's groups realised the importance of tasting nutritious food through PRA approach and took a decision to have demonstration of supplementary/nutritious food demonstration session every month. The mothers groups themselves contributed money / materials like locally available vegetables, cereals and pulses every month for the demonstration
session. During this session good interaction took place among mothers that motivated them to adopt in their homes what they learnt in the sessions. The TINP staff contributed their ideas and discussed about the nutritive values of the demonstrated supplementary foods.

c. Community garden

During the Tamil month 'Aadi' i.e July month, the villagers use to form "Payer Kuzhi" i.e. growing vegetables in the kitchen garden. There is a proverb "Aadi Pattam Thedi Vithai" *. The VLMC got the idea of forming community garden during this month and used the vegetables produced for the noon meal centre. They also decided to plant 'papaya' and 'Drumstick' trees for permanent use and implemented it. Thus community garden emerged in the Action Centres. Some of the TINP centres are having 'Papaya' and 'Drumstick' trees but not having 'Payer kuzhi'.

d. Joyful learning

The VLMC discussed and decided to improve the strength of pre-school children to 100 percent. So, they took responsibility to make the centre colourful by way of drawing pictures of animals, fruits, vegetables, national leaders etc. inside the centre. They also mobilised play materials to attract the children for joyful learning.

* "Aadi Pattam Thedi Vithai" means rising the crops during the right season when the monsoon starts.
e. Thrift society

The women groups have also developed 'Self help group' concept and started group savings. Each member contributed Rs. 20/- every month and the money has been utilized for internal lending. The group members utilised the money for emergency purpose and also for education, medical expenses etc. with a low rate of interest.

3.7. Intervention strategies

3.7.1. Participatory approaches carried out in the Action Centres

In the selected A.C. Villages the participatory approaches were introduced by the PRA team. The total intervention period was for one year. In the first month the participatory exercises such as Social mapping, Venn diagram, Seasonal Analysis, Trend change and problem analysis were conducted one by one in every week. By the end of the first month all these exercises had been completed and the VLMC was formed. Based on the output of these participatory exercises the VLMC started functioning in the Action Centres.

In the Action Centres the Community Nutrition Worker first organized community meeting in the village and introduced Social Mapping exercise. In this exercise the community realized the nutritional status of children in the village and identified the houses of the malnourished children. The
village leaders advised the parents of the malnourished children to utilize and follow the advice and services given in the nutrition centre. Further the Social mapping exercise clearly showed that the members of the women's working group and Adolescent Girls working Group were located only in and around the Nutrition centre and CNW's residence. There was no representation from all parts of the village. As a result the community groups have been reorganized and equal representation was ensured both physical and caste wise.

Though the worker has registered all the Antenatal mothers and child birth, the community leaders and W.W.G. members made special enquiry about the care given by the worker. The Social mapping exercise also helped the community identify the families having more than two children who were advised to follow family welfare methods like sterilization. The community has spent nearly three hours in the night to complete this exercise. The community has also decided to meet the subsequent week the same day, same time i.e. Friday, 8 P.M.

After a week's gap the worker organized community meeting and introduced seasonal Analysis and Trend Analysis exercises. The seasonal Analysis exercise helped the community realize the nutritive value of vegetables and food grains produced by them in various seasons.
Though the villagers produced vegetables and food grains, most of them were interested in selling in the market and they used only very meager, that too not of good quality.

The PRA team facilitated the realization of the nutritional value of their own products among the people and made them to understand the importance of taking nutritive food especially by A.N. mothers and children below 5 years. This helped the community to think and realize the use of their own cultivated vegetables and food grains as much as possible.

On the same day Trend Analysis exercise was also introduced by the PRA team and take them back to 50 years 25 years ago and discussed with them regarding the food habits, A.N. care, child delivery, breast feeding, child care etc. All these were compared with present system. The community also realized that they have consumed un adulterated nutritive food like ragi, maize etc., and the quantity was also high in that period. At present they are consuming rice and allied products only. The quantity of intake is also low. It was mainly due to modernisation and less manual work. The PRA team discussed all these food habits with the community and people came to a conclusion that they have to take ragi and maize as much as possible along with rice. In olden days A.N. mothers were given more respect and care. But during delivery time there is no proper planning and
safe delivery system. The community discussed this issue and decided to give special care during A.N. period as in the earlier days and insisted proper planning for safe delivery.

Subsequent week the PRA team introduced Venn Diagram exercise and initiated the community to discuss about the importance of MCH service providers and their availability and accessibility of services to the community. Though the Village Health Nurse provided health care services the frequency of her visit was only once in a month i.e. during Immunisation days. As per the work routine of the VHN, she has to visit the village once a week. The community leaders advised the VHN and assured to render necessary help and ensured her visit to the village every week. The Grama Sevika, who is responsible for women welfare schemes has not visited the village properly. This problem was also discussed with the Grama Sevika and ensured her to visit go the village once a month.

The PRA team now got in to Problem Analysis exercise. The community listed out their village problems and priorised it. They have also identified the problems which can be solved by themselves and those to be solved by the service providers and acted accordingly.

In all, the community realized the importance of health and nutrition care and came to a decision that they have to constitute a Village Level
Monitoring Committee (VLMC) consisting of nine members (both male & female) to implement, supervise and monitor the programmes regarding mother and child health. They have also decided to meet every month. All the above exercises were completed over a period of one month and VLMC started functioning. During the VLMC meetings the service providers like Community Nutrition Worker, Child Welfare Organiser, Village Health Nurse, Grama Sevika etc. also represented their problems and obtained community support to solve their problems.

Based on the participatory approach, the community itself arranged for cooking demonstration sessions every month.

People also donated plates, tumblers, water drum to the centre. Wall painting for pre-school children, construction of compound wall and formation of kitchen garden were done by the community itself. The quality and preparation of noon meals supplied to the children improved by way of providing adequate vegetables and green leaves donated by the community. They have also conducted quarterly meetings for preschool children's parents and discussed with them about the quality of services provided at the centre.

The VLMC conducted PRA meetings in the ACs every month. In the monthly meetings VLMC discussed the Health & Nutrition status of their village and planed for further improvement. During this period if the
workers/villagers spoke of any problems either in the implementation or services, VLMC took efforts to solve the problems through participatory method and approaches.

3.7.2. Communication strategies carried out in Normal Centres and Namakku Naame Centres during the study period

The Community Nutrition Worker (CNW) usually opened the Centre daily by 7.00 A.M. She prepared and fed supplementary food to the malnourished children in the age group of 6-36 months. At the time of feeding, the CNW gave nutrition education to the mothers and asked them to prepare nutritive food in their homes. In the after noon the CNW planned for home visits. During the home visit she met the antenatal and postnatal mothers, the mothers of malnourished children, prolonged feeding children and relapse children and gave need based health and nutrition education.

The CNW has formed three community groups i.e. Women's Working Group, Adolescent Girls Working Group and Children's Working Group. Every month she has conducted women's working group meeting in the afternoon of second Friday, for Adolescent Girls the meeting would be in the afternoon of third Thursdays and for the children's working group in the afternoon of third Fridays (Fixed day system has been followed throughout the State for easy remembrance and for effective supervision). During these
meetings the CNW has discussed and educated them regarding maternal and child health issues.

Every month 23rd - 25th is declared as weighing days and the CNW weighed all the 0-36 months old children and monitored their growth. Based on the weight, she distinguished the normal children and malnourished children. If the child became normal after 90 days feeding, she would graduate* the child and stop the supplementary feeding. If a normal child became like-wise malnourished then she could select the child for feeding and start feeding on the first day of subsequent month. During the time of weighing also she would give health and nutrition education to the mothers. Apart from this she has conducted National Nutrition Week celebration and Breast Feeding Week celebration.

3.7.3. Community Groups

Various types of community groups are organised rather in a routine fashion by all CNCs almost as a rule. Described below are the different types of community groups that function at the community level through which the personnel of CNC coordinate their gross root level communication.

* Graduation means that the child selected for feeding will be fed supplementary food for a continuous period of 90 days. Even within the period if the child become normal feeding will be continuous and graduated after 90 days only. If the child is not become normal even after 90 days feed the feeding will continue till it becomes normal.
Thus all these groups did exist in all the CNCs under research in this study. However this researcher and those who assisted him through the study period needed to be extra alert in noting any subtle differences, if they occurred at all, in the style of functioning of these groups.

3.7.3.1. Women's Working Group (W.W.G) :

The CNW has formed 15-25 mothers as a Women's Group. The mothers who are interested in village development activities and could influence the community were identified and formed into groups, with equal representation among all the caste groups and areas.

3.7.3.2. Adolescent Girl's Working Group (AGWG) :

The CNW has formed 15-25 adolescent girls as a group. The interested girls were identified and formed as a group, equal representation among all the caste groups and areas.

3.7.3.3. Children's Working Group (CWG):

The CNW has identified 15-25 children in the age group of 12-15 years and formed a group. These groups were mainly for educational activities like rallies, cultural programmes etc.

3.7.4. A word about Namakkul Naame Thittam :

In Namakkul Naame centres as the title suggest, there were open efforts to promote participation among the people. However the quality of
participation could not have been expected to be as high as in the case of Action Centres. Further promotion of participation was not done by those who were themselves trained in promoting peoples participation. In the same way as is done by facilitators of PRA methodology.

3.8. Framework of analysis

KAP survey was also conducted about the services and educational activities involving the mothers. Based on the KAP survey findings a scoring pattern was adopted: for this purpose those who are having knowledge about a specific activity are given one point and for those having attitudinal change two point and for those who are practicing three points. After arriving at the total score for each respondent, mean value, standard deviation, standard error and 't' values have been calculated by using the statistical methods for each centres and found significance among the centres.

The indicators influenced by the communication process are taken together for analytical purpose in this study. All the ten indicators related to maternal health and fifteen indicators related to child health were chosen and analysed. In TINP Gr. III & IV children and grade II children indicators were used separately, but in this study Gr. II, III & IV children were merged as one indicator because some of the villages are not having Gr. III & IV children.
The overall impact of the programme on MCH has been presented on the basis of the progress as shown by the indicators. So, it was decided to present the overall impact by using quartile presentation in this study. A five point scoring pattern has been designed for each indicator on the basis of five points for the maximum achievement and one point for the minimum achievement.

The descriptive method of analysis has been used for the present research, the data has been organised and presented in the form of tables. The analysis chapter gives a complete picture of the study.

3 J. Limitations of the study

1. For baseline, the data available with the workers were used for the following reason.

   a. The indicators used in TIN? were taken as indicators for this study also.

   b. The required data were available with the workers and it will be a repetition to collect the same data.

2. The researcher could not participate in all the PRA meetings conducted in the Action centres because some of the meetings were conducted simultaneously.
3. But for the cooperation of the project officials the coverage in the study would have been much more limited.

4. Due to administrative reasons the duration of the study had to be limited for one year for recording and reporting purposes.

5. Owing to limitations of manpower, the researcher resorted to the indirect method of KAP instead of participatory evaluation. Although this could be taken as a limitation technically, KAP responses as reflections of the impact as participatory approach in the case of ACs can not, however, be ruled out.

3SO. Practical implications

The study, by and large helps in finding out ways and means for active and effective involvement of beneficiaries. The attempt in the study is to see whether the rural mothers coming under MCH programmes do carry at all with themselves the ability to become participants in the programme rather than being mere recipients. If this could be seen to be so, as more and more TINP centres take to participatory approach, the usage of the term 'beneficiary' itself may undergo a rethinking process.

This study also helps the programme implementing executives, officials and workers to move much closer to the people and to try the bottom-up approach at every stage of the programme(from planning to
evaluation). This will also help to develop a positive attitude among the officials towards working with people. The results of this study, it is hoped, on the one hand will enthuse grass-root level workers to make their job more interesting and challenging; on the other hand, may lead to some revisions in programme planning on the part of policy makers.

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