

CHAPTER III

PROJECT DESIGN

The present project was divided into 4 sequential phases as follows :

Phase I : Exploration and analysis.

Phase II : Programme planning and preparation.

Phase III : Programme implementation.

Phase IV : Evaluation of the programme.

Phase I : Exploration and Analysis

The exploration was done by (A) testing the knowledge of health functionaries by administering a questionnaire, (B) observing the skills and competences of the health functionaries by accompanying them on the field and (C) obtaining the relevant information from the pilot studies of the larger project.

(A) Questionnaire

This was formulated on the basis of (i) available literature, e.g. content of their training programme/syllabi, job charts etc., and (ii) observations and results of previous studies e.g. diarrhoea caused the greatest death toll or anaemia and malnutrition were very high - did the functionaries know the prevention and care for them and (iii) interviews and discussions with tribal parents, government officials in-charge of planning and the grassroot workers in-charge of implementation.

It was necessary to measure the content/face validity and reliability of the questionnaire.

Congent validity was established by giving the tool to seven experts from the field of child development, gynaecology, nutrition, pediatrics and preventive and social medicine. They were requested to - (i) critically evaluate the content for its adequacy, clarity and appropriateness, (ii) establish standard answers.

Those items which were considered appropriate and clear by 4 out of 7 experts were included in the tool. The experts were further consulted for modification, addition or deletion of the remaining items. This helped in validating the coverage of a given area, namely, health, nutrition and family planning. Thus the finalized tool was translated in simple gujarati.

The experts were also requested to give expected answers for each item. Again, the answers having frequency of 4 or more were considered as standard answers. This helped in rating the responses of the sample.

For establishing the reliability of the tool, the questionnaire was administered to 6 health functionaries from Limkheda, having a similar background and characteristics as the main sample. Results of this pilot study indicated that the questionnaire was comprehensible, clear and eliciting relevant and consistent answers. Since the items were understood by the given population accurately, no further modification was found necessary.

(B) Observation

Field observations were done to obtain information about their communication skills and how the functionaries perform

their duties. The investigator and the research associate accompanied 6 health functionaries on the field going from house to house. After the initial visits on the first day, inter-rater reliability was established. An attempt was made to formulate categories from the recorded running observations. Most of the observations were used to plan role-plays and give examples while conducting sessions.

(C) Highlights of the Relevant Information from the Pilot Studies of the Larger Project

The relevant information was pulled out which served as one of the bases for programme planning, such as common childhood diseases in Panchmahals, supplementary feeding, importance of spacing and limiting the size of the family etc. The highlights of the pilot studies were used for (1) preparing the questionnaire as mentioned earlier, and (2) to plan the content for specific sessions of the programme.

Phase II : Planning and Preparation

This section is further divided into four aspects namely (a) sample selection, (b) programme planning, (c) contacting resource persons, and (d) boarding, lodging and transport arrangements.

(a) Sample Selection

The questionnaire was initially administered to 6 health functionaries to check the reliability of the tool. Later it was administered to 43 health functionaries, making a total sample of 49. This included 3 BEEs, 4 HVs, 14 ANMs and 28 MPHWS.

Data were collected at Limkheda PHC. The time taken to fill the questionnaire ranged from 1 hour to 2½ hours. Majority of them could complete it in 1½ hours.

The data were analysed keeping the correct responses by experts as guidelines for rating each items of the questionnaire. Percentages were calculated for the correct responses. While rating, it was found that certain responses were more appropriate than the responses by experts. A separate note was made was used for the discussion.

The selection of health functionaries as participants in the training programme ideally would have been on the basis of scores obtained on the knowledge content questionnaire but for practical reasons it had to be on the basis of recommendations of their supervisors and feasibility of their being relieved from their routine work during the period of training. Considering the type of programme, it was thought appropriate to have a small size of the sample. The project administrator and the DFPO also agreed with the idea of having fewer trainees but giving the intensive training with individual guidance and small group discussions.

The criteria for sample selection was as follows :

1. Representatives of all three PHCs and Sadguru Seva Sangh, a voluntary agency.

2. Representatives of different categories of workers.
3. All those who had not attend^{ed} any training programme in the last two years.
4. Those who were willing to come for the training.

The health functionaries who did not fill the questionnaire earlier but only after the orientation session of the programme, were 3 NOs, 1 CDPO, 2 MSs and 2 ANMs of a voluntary agency. Their names were sent very late and hence it was not possible to administer the questionnaire with the earlier sample.

Table consists of 2 samples :

Sample A : Field level health functionaries and their supervisors who attended the training programme (for pre-testing knowledge content).

Sample B : Field level health functionaries from Sample A (for post-testing knowledge content).

Table 3
Sample Distribution

Functionaries	Sample	
	A	B
Primary Health Centre (PHC):		
Medical officer (MO)	3	-
Block Extension Educator (BEE)	2	2
Health Visitor (HV)	2	2
Auxillary Nurse Mid-wife (ANM)	5	5
Multi-purpose Health Worker (MPHW)	5	5
Integrated Child Development Scheme (ICDS):		
Child Development Project Officer (CDPO):	1	-
Mukhya Sevika (MS)	2	-
Sadguru Seva Sangh Trust:		
Auxillary Nurse Mid-Wife (ANM)	2	-
TOTAL	22	14

The sample characteristics of the field level health functionaries were as follows:

1. The age of the workers ranged from 24 to 48 years.
2. There were 7 males and 9 females (2 females from Sadguru Seva Sangh).
3. Marital status of the workers showed 7 males and 7 females were married. Out of the other two women one was a widow and the other was unmarried.
4. Except for one male, the rest stayed with their families whereas 4 females stayed with the families and 5 away from the families.

5. Majority (13), were non-tribal⁵ whereas 3 were tribals.
6. Regarding the education level of health functionaries six were less than S.S.C., six had completed S.S.C. and 2 BEEs were graduates.
7. Four functionaries had 2 to 5 years of working experience, 6 had 5 to 10 years and 4 had more than 11 years.

(b) Programme Planning

Programme was planned on the basis of gaps found in knowledge content, observed lack of skills and strategies adopted in approaching and educating the tribal parents. The sessions were planned in classroom by using different methods such as lecture-cum-discussion, demonstration, role-play, preparation of materials etc. On-the-field sessions were planned to give an opportunity in dealing with real life situations.

(c) Contacting Resource Persons

Resource persons (Appendix 3) were contacted to conduct sessions on the following topics: Childhood illnesses and diseases, family planning methods effective with tribal population, supervision, skills and competencies essential for working with the tribals. A brief note for the outline of their respective topics was prepared on the basis of Phase I. e.g. The pediatrician was requested to highlight and emphasis the common diseases/illnesses in young children especially diarrhoea and PCM which are common in this area. Further, they were requested to elaborate with the examples on what the health functionaries can convey to parents as the promotive and preventive measures

and treatment for such diseases/illnesses.

(d) Boarding, Lodging and Transport Arrangements

Bhil Seva Mandal, a voluntary organization willingly accepted the responsibility of boarding and lodging during the vacation period. Health department of Gujarat Government and Sadguru Seva Sangh, a voluntary agency, provided the transport facilities for the on-the-field sessions.

Phase III : Programme Implementation

The programme was conducted from 11th to 25th November 1983. The in-service training programme for the field level health functionaries covered following topics:

1. Clarification of the job charts.
2. Problems, attitudes and motivation of functionaries.
3. Base-line surveys.
4. Health, nutrition and family planning education for tribal parents- content, strategies and use of aids.
5. Record keeping.
6. Skills and competencies.
7. Supervision and coordination.

Supervisors attended and participated in programmes related to item numbers 1, 2, 6, and 7.

The detailed programme (the module) is presented in a tabular form herewith. An outline of the programme was distributed during the first session to the participants (Appendix 5).

Phase IV : Evaluation of the Programme

The same questionnaire and observation tools used for the pre-test and pre-observations were used to evaluate the impact

MODULE OF IN-SERVICE TRAINING PROGRAMME FOR HEALTH FUNCTIONARIES

Date and time	Programme	Resource person	Objectives	Programme details	Aids and methods
11.11.83	Inauguration and orientation	Mrs. Parul Dave	To orient the trainees regarding: 1. Objectives of the training programme. 2. Overall framework of project. 3. Role of the participants.	*	Display of material, reports.
11.00 am to 12.30 pm			*List of invitees and speakers for inauguration: Inauguration by Chief Guest 1. Mr. S. Damor (M.P.) 2. Shri D.B. Naik, Founder Trustee of Bhil Seva Mandal, Dahod. 3. Dr. J.C. Gandhi, District Family Planning Officer, Godhra. 4. Mr. A.K. Nigam, Project Administrator, Dahod. 5. Shri S.K. Sheth, Founder Trustee of Bhil Seva Mandal, Dahod. 6. Shri J.B. Ninama, President, Bhil Seva Mandal, Dahod. Vote of Thanks 7. Mrs. Parul Dave.		

Date and time	Resource person	Topic	Objectives	Content	Aids and method	Evaluation
11.11.83 2.00 am to 5.00 pm	Mrs. Parul Dave	Job Charts	1. To summarize the duties and responsibilities of health functionaries under various areas of work. 2. To help them trace the gaps and overlaps in the job charts. 3. To suggest alternatives, if necessary, in the job charts for better implementation of the programme.	1. Scrutinize job charts under various areas of work e.g. field work, administration, etc. 2. Small group discussion among functionaries of same cadre but belonging to different PHC's e.g. ANM of Dhanpur & ANM of Dudhiya 3. Small group discussion of different cadre and different PHC to have an overall view of the services offered and to trace the gaps and overlaps e.g. MPH of Dudhiya, ANM of Limkheda, MO of Dhanpur.	Group discussion, cyclostyled charts of the job responsibilities. (Appendix 6-A)	1. Reports of the discussion, suggesting change or improvement based on gaps and overlaps.
12.11.83 1) 9.00 am to 12.00 2) 2.00 pm to 5.00 pm	Mrs. Parul Dave Ms. Vanita Majithia	Problems, attitudes and motivation of functionaries.	1. To provide opportunity to thrash out their own professional and personnel problems in light of the existing working conditions. 2. To help them perceive the situation of tribal parents and child care realistically. 3. To help them identify the incentives and satisfactions in their job situation.	1. Results of the earlier study of the project on problems of attitudes found in the functionaries. 2. Job satisfaction, and incentives in their role performance as health functionaries. a. Case studies of good and bad workers.	1. Informal discussion. 2. Reporting results 3. Prepare similar pan-picture 4. Ask questions on the basis of situations	Discussion on 1. Problems faced 2. Realistic perception 3. Suggestions for solving own problems 4. Involvement/participation 5. Motivation level

Date and time	Resource person	Topic	Objectives	Content	Aids and method	Evaluation
13.11.83 9.00 am to 12.00 noon 2.00 pm to 5.00 pm	Ms. Swati Trivedi & Ms. Pragnya Patel	Health	4. To encourage them to come out with a positive outlook by working out realistic solutions to the problems that can be solved and to accept the problems that cannot be solved. 1. To fill the gaps in knowledge content of the functionaries in the area of health. 2. To make them aware of the specific opportunities in educating the parents. 3. To orient them regarding home cures of common diseases.	1. Factors influencing child health. 2. Common illness and disease - cures, detection, treatment 3. Talk on diarrhoea, anaemia, scabies and conjunctivities	Charts, puppets, cassette-discussion, lecture, role play and game. Cyclostyled material (Appendix 6-D).	1. Suggestions regarding treatment. 2. Perception of their role as a patient.
14.11.83 9.00 am to 5.00 pm	Mrs. P. Dave Ms. S. Trivedi Ms. P. Patel Ms. V. Majithia	Field trip on health	1. To put the previous day's learning into practice. 2. For better learning through practical demonstration. 3. To observe them on the field and to find out their attitudes towards work. 4. To give first hand information on methods of approaching people and conducting programmes.	1. Dramatization of 2 topics; (a) Clean illness; (b) Role of health worker in preventing diseases.	Dramatization and role play, cassette and puppets	1. In giving suggestions on treatment 2. Their role in dealing with patients

Date and Time	Resource persons	Topic	Objectives	Content	Aids and method	Evaluation
15.11.83 9.00 am to 11.00 am	Ms.V. Majithia	Nutrition	1.To inform them about the prevalent health/nutrition condition of children below five yrs. 2.To provide knowledge about different nutrients and their importance, ill effects, prevention and treatment of their deficiencies. 3.To orient them about calculating nutrients to see for themselves what each food contains. 4.To provide information about cheap and rich nutritious foods.	1.Concept of nutrition. 2.Diet requirements. 3.Department research on malnutrition. 4.Its causes, effect, detection, prevention and treatment. 5.Meal planning of a three year old. 6.Breast feeding - its importance. 7. Weaning foods.	Lecture and discussion Black-board, chart, Cyclostyled material (Appendix 6-D).	1.Discussion of pertinent points. 1.Prepare menu for 3 year old child and calculate nutritive values.
11.00 am to 1.00 pm	Ms.S. Trivedi Ms.P.Patel	Recipe demonstration	1.To acquaint them with different methods of cooking and preserving nutrients as well as maintaining cleanliness while cooking. 2.To demonstrate easy to cook yet cheap and nutritious receipes.	1.Demonstration of Muthia, Masala rice, germinated chana and dhokla. 2.Weaning foods-Maize soup, groundnut milk. 3.Cooking methods	Demonstration and discussion	1.Observing involvement and enthusiasm to learn
2.00 pm to 5.00 pm	Dr.Modhiya Health and		1.To find out paediatrician's views of prevailing health and nutritional conditions 2.Comparison of tribal and non-tribal children. 3.Common childhood diseases, prevention and cure.	1.Common illnesses 2.Entry of doctor in tribal setting. 3.Utilization of services. 4.Prevaling conditions.	Lecture followed by discussion	1.Better perspective 2.Clarification of issues 3.Increased knowledge content.

Date and time	Resource persons	Topic	Objectives	Content	Aids and method	Evaluation
16.11.83 9.00 am to 5.00 pm	Mrs.P.Dave Ms.V. Majithia	Field visit	1.To put previous day's learning on approaches plus cooking demonstrations into practice. 2.To observe them on the field.	1.Role play on: a.Antinatal care b.Disease- Illness and cure. 2.Demonstration of cooking Hyderabad mix and dhokla	Role play and demonstration All cooking ingredients, charts	1.Ability to explain 2.Use of different approaches
17.11.83 9.00 am to 12.00 noon	Ms.V. Majithia	Nutrition	1.Continuation of meal planning			
1.00 pm to 3.00 pm	Ms.P.Dave	Preparation of visual aids.	1.Awareness regarding simple methods of making aids. 2.Providing guidelines for selecting and preparing aids for daily use.	1.Results of research on audio visual material. 2.Giving guidelines of objectives, messages, methods of preparing aids on given topics- cleanliness, cooking methods, kitchen gardening, responsible parenthood, weaning and family planning methods	Cyclostyled sheets on preparation of aids and their evaluation (Appendix 6 D,I,J). Material, chart paper, crayon, paints, gum cils, gum etc.	1.To see how they select topics and make an attempt to prepare audio-visual aids.
3.00 pm to 4.30 pm	Dr.B.K. Patel	Family planning	1.To clarify concept of family planning and family welfare 2.Help them identify and tryout positive approach and methods for making family welfare programmes acceptable to the target group. 3.Identify and give possible solutions to problems in implementing family welfare programmes	1.Difference between family planning and family welfare 2.Different programmes going on in the district. 3.Reasons for successful and unsuccessful programmes. 4.Approaches and methods useful in the tribal set-up.	Lecture followed by discussion	1.Clarification of concepts 2.Increased knowledge

Date and time	Resource persons	Topic	Objectives	Content	Aids and method	Evaluation
18.11.83	HOLIDAY					
19.11.83			1. To clarify concepts of family planning and family welfare. 2. Help them identify and tryout positive approach and methods for making family welfare programmes acceptable to the target group. 3. Identify and give possible solution on to problems in implementing family welfare programme.	1. Concept of family planning and family welfare. 2. How to approach parents and work in this area.	Discussion cyclostyled material. (Appendix 6-E, F).	1. Clarification of concepts.
9.00 am to 10.00 am	Mrs. P. Dave	Family planning				
10.00 am to 12.00 noon	Mrs. P. Dave	Record Keeping	1. To make them realize the importance of evaluating programmes for better planning and implementation. 2. To help them chalkout long and short term programmes. 3. To enable them to plan and prepare for daily and weekly duties for better functioning.	1. How to plan a programme. 2. What are the priorities and emergencies. 3. Preparation of individual time-table and work load. 4. Methods of evaluating a programme.	Discussion, cyclostyled material (Appendix 6-G)	1. Preparation of time-table 2. Knowledge content
20.11.83	Mrs. P. Dave	Orientation to field visit & preparation of visual materials	To enlighten them about: 1. The demographic picture of the village through house to house survey. 2. To chalk out need based programmes which would be beneficial. 3. How to use the aids.	1. Questionnaire of house to house survey to collect background history of family, needs, problems, diseases and services available.	Cyclostyled questionnaire (Appendix 6-K)	1. Use of the technique for house to house survey

Date and time	Resource persons	Topic	Objectives	Content	Aids and method	Evaluation
21.11.83 9.00 am to 4.00 pm	Mrs.P.Dave Ms.V. Majithia	Field trip	4.Different approaches and techniques. 1.To expose them to the village using a pre-discussed questionnaire to collect information. 2.To enable them to see the different approaches and use them for interviews. 3.To provide opportunity to work in pairs to collect information.	House to house survey- Rapport building and collecting information to assess needs of the family. 1.To expose them to the village using a pre-discussed questionnaire to collect information. 2.To enable them to see the different approaches and use them for interviews. 3.To provide opportunity to work in pairs to collect information.	1.House to house survey in pairs of a male and a female worker. 2.Observing self and the other.	1.How do they justify the number of houses visited and information gathered. 2.Learn to observe the other partner take interviews and correct upon it for himself
22.11.83 9.00 am to 12.00 noon	Mrs.S. Jagawat	Supervision and coordination	1.To enlighten them about the working of Sadguru Seva Sangh and their coordination within and with other agencies and the role of supervisor therein	1.Supervision of the staff in their agency. 2.The lack of coordination in government organizations. 3.Ways and means of coordinating with government agencies and workers.	Lecture with practical examples, discussion	Questionnaire session
2.00 pm to 5.00 pm	Mrs.P. Dave	Supervision and coordination	2.To enable them to trace out areas of work where supervision and guidance is required and desirable. 3.To make them aware of the importance of proper coordination-how to attain and incorporate in the work situation.	1.Meaning of supervision. 2.Areas of supervision 3.Qualities of a good supervisor. 4.Advantages of proper coordination 5.Dimensions of coordination: a.National, State Local. b.Government and voluntary.	1.Discussion. 2.Role play 3.Cyclostyled material (App.6L) 4.Examples of properly coordinated programmes	1.To see if they can perceive the role of supervisors and supervision 2.How do they can view their own role in coordination with others.

Date and time	Resource persons	Topic	Objectives	Contents	Aids and method	Evaluation
				6. Revising job charts (related to 1st session)		1. Suggestions for items the need guidance in different areas 2. Model prepared (Convincing parents) for the coordinated programme of supervisors).
23.11.83 9.00 am to 4.00 pm	Mrs. P. Dave Ms. V. Majithia	Field trip	1. To provide experience of conducting parent education programme in the same village. 2. To help them evaluate their own programme. 3. To provide opportunities for the supervisors to observe on the spot and evaluate in the discussion that followed	1. Conduct session on (1) family planning, (2) anti & post-natal care, (3) immunization, (4) breast feeding, (5) cooking methods, (6) kitchen garden, (7) family planning, (8) responsible parenthood.	Home-based parent education in pairs using A.V. aids	1. The role performance of field level workers in conducting the programmes. 2. How did the supervisors guide and evaluate
24.11.83 9.00 am to 11.00 am	Mrs. P. Dave	Skills & competencies	1. To help them identify skills and competencies necessary in work situation. 2. To help them identify their own skills and competencies and how to build on them	1. Required skills and competencies. 2. Self evaluation. 3. Evaluation and preparation of materials for education parents.	1. Cyclostyled material of skills (App. 6-H) 2. Lecture & discussion 3. Examples from their field experiences.	1. Self evaluation report
11.30 am to 12.30 pm		Film show	1. To reinforce earlier discussions on family planning, health and nutrition, breast feeding, through another medium.	Department slides on feeding and family planning. Other slides on nutrition and health.	Slides, projector	Knowledge content Questionnaire

Date and time	Resource persons	Topic	Objectives	Contents	Aids and method	Evaluation
2.30 pm to 4.30	Dr. Shanon	Skills & competencies	1.To orient them to different skills employed in working with the tribals. 2.To share own experience with practical examples.	1.How to work on the field. 2.Essential skills and competencies.	Talk, discussion	Question-answer session
25.11.86 9.00 am to 11.00 am	Mrs.P. Dave	Individual meeting.	1.To help them evaluate themselves and the programme.	Filling the evaluation forms: 1.Overall evaluation of programme with emphasis on its usefulness and suggestions for future planning of such programmes. 2.Individual self evaluation covering (a) understanding of health objectives of health programme, (b) methods and approaches for conducting home visits (c) phases of programme, (d) skills and competencies required. 3.Modifications in time movement & job charts	Cyclostyled evaluation form (App.6-N) Individual meeting with the coordinator	Self and programme evaluation
2.00 pm 4.00 pm	1.Mr.Panchal 2.Mr.R.Vyas & Mrs. Soloman	Valedictory session		(1) Workshop report. (2) Learning experiences		
	3.Dr.J.C.Patel 4.Ms.V.Majithia			(3) Brief talk and distribution of certificate (4) Vote of thnks.		

of the training programme and served as post-test and post-observations.

(A) On-going (In-built) Evaluation

Discussion during and after each session were recorded and conclusions were drawn from them. Care was taken to include their suggestions for later sessions. The questions at the end of each session enabled to find out whether the programme was meaningful and at their level. The initial sessions helped in assessing their individual knowledge, confidence, communication skills etc., and therefore it was possible to give them individual guidance.

(B) Follow-up Evaluation

About a month and a half after the programme, a follow-up evaluation was done to find out the effect of the programme by administering the same questionnaire which was used for pre-testing the knowledge content. Percentages of post-test were compared with those of pre-test. Findings of these are presented in a tabular form in the next chapter.

Field observation of eight health functionaries were made to find out whether the training programme had any impact on their interaction with the tribal parents and if they could make use of different approaches and strategies to educate the parents.

All the eight functionaries were observed but for more or less time and either in day-to-day work or conducting group meetings. The remaining six functionaries were rated on the basis of their participation during later sessions of the programme.

The ANMs from Sadguru Seva Sangh were neither given a pre-test for a post-test. Their supervisor's opinion on the programme was sought.

On the basis of the results, two case studies of functionaries are presented. Out of these two NPHW, benefitted least from the programme and the other had benefitted the most.

The supervisors were evaluated on the basis of (A) only. As the major objective of training the supervisors was to enable them to guide and support the field level health functionaries, they were involved only in the sessions on clarification of job charts, meaning and scope of supervision and coordination. The observations of supervisors made during these sessions are discussed in the related sections and not separately.

Delimitation of the study Since the nature of the study was to understand the process of training and modification in the module prepared and used, the type of analysis used is descriptive and qualitative rather than quantitative. The statistical analysis is therefore restricted to calculation of percentages only and no other statistical test was used to establish significance of difference between pre and post test or pre and post observations.

The next chapter entitled 'Project Evaluation and Outcome' consists of knowledge content of health functionaries, the skills and competencies required, case studies. Lastly, recommendations are worked out for trainers and administrators who are associated directly or indirectly with the health functionaries.