

CHAPTER - III

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METHODOLOGY

III.1 INTRODUCTION

The present survey, as illustrated in the objectives mentioned in Chapter-I, aims at studying (i) the historical evolution of the TERD Project, (ii) the nature of the TERD Project (iii) its effectiveness to various stages of concerned organisations and rural development, and (iv) its realisation to community's needs in the Eight United Teachers Colleges in Thailand. The investigation is to study the overall set up of the Teacher Education for Rural Development of the Department of Teacher Education, various problems faced by its implementation and operational officials, teacher trainees, village chiefs and village people. their perceptions pertaining to the relevance of the TERD Project towards the rural development programme. Detailed outlines of the research design for this investigation is being described in the following pages.

III.2 RESEARCH DESIGN

The research design, in all research efforts, depends on the final outcomes of the research that have been pre-determined to obtain. Actually, the objectives of the research illustrates the nature of the research design which gives a specific direction to various aspects desired to investigate in order to receive authentic data for analysis. It should be clarified that the present investigation is totally and purely a descriptive survey, and it is not aimed at evaluating the results of the TERD Project. The present

investigator is designing his research programme strictly following the scope of the proposed objectives the details of which are described below :

2.A Objective-I To study the history of Teacher Education Programme for Rural Development in Thailand since its birth in 1956.

Various aspects selected to study include the organisation, implementation, personnels, course contents, and perceptions of teacher trainees and of community people. Various problems faced by various level of personnels and their suggestions for improvement of the project is also included in the investigation programme. It is the achievement of TURTEP as a whole, and this will also revealed through perceptions of product-personnels.

2.B Objective-II To study the nature of the Teacher Education Programme for Rural Development (TERD Project), the new educational policy of teacher Education for rural development, modified from TURTEP in order to match with the present government policy for rural development in its Fifth Five-Year National Economic and Social Development Plan (1982-1986).

Various aspects to be studied include the course contents of the Teacher Education for Rural Development being provided at various United Teachers Colleges, its planning, organisation, personnel, implementation, physical facilities, budgetting, monitoring, student teachers participation in the project and community involvement. Perceptions of various officials concerning with the project, i.e. Project's Directors and College staffs in order to highlight the nature of the project.

2.C **Objective-III** To study the effect and limitations of the TERD Project through perceptions of various personnels viz. (i) Administrative heads, (ii) Teachers College Staffs (iii) Student Teachers, (iv) Co-operating teachers, (v) Village chiefs and (vi) Village people.

In this section, two main aspects viz. (i) effect of the project and (ii) problems and limitations of the projects have been selected for investigation by scrutinising various opinions of the above described group of personnels. The effectiveness as well as limitations of the project can be deeply highlighted by analysing various given opinions/perceptions of these personnels about the authentic situation of the project.

2.D **Objective-IV** To investigate whether the objectives of the TERD Project are being realised to the needs of rural development.

In this section, the investigation includes the scrutinisation of various behavioural activities through perceptions of various levels of personnels involved and the investigator's own observations.

III.3 NATURE OF DATA

Keeping in view the objectives of the study, extensive data were to be collected for investigation such as :

1. Information pertaining to the genesis of the TURTEP Project like aims, organisational structure, planning, implementation, physical facilities, budgetting, results achieved and problems faced.

2. Information pertaining to the nature of the TERD Project with regards course contents, planning, organisation, personnels, implementation, physical facilities, budgetting, monitoring, student teachers' participation, and community involvement.
3. Information on perceptions of various Teachers College officials, Head-Masters, co-operating teachers, student practice teachers, village chiefs and village people involving in the project.
4. Information on perceptions and reactions of various respondents pertaining to the effectiveness of the project to rural development, basic needs of the community and field observations by the present candidate on various activities initiated by student practice teachers in collaboration with various other agencies involving in the extension work of rural development.

III.4 SOURCE OF DATA

As mentioned in the preceding pages that the study has been proposed to examine the historical development of the TRTEP (Rural Teacher Education) its achievements and activities as well as various problems faced in order to satisfy the first objective of the study. The sources of data can be grouped as follows :

1. Annual reports of the Teacher Education Department.
2. Official research reports.
3. UNESCO reports like -
 - a. Consolidated project final reports.
 - b. Proceedings of the regional conferences as well as International Symposia.

4. Handbook of TURTEP and handbook of the TERD Project.
5. Books of collective papers and other publications.
6. Research work of various individual researchers concerning to the Rural Teacher Education Project.
7. Unpublished records of the teacher colleges, co-operating schools and various official orders (letters).

For objectives two, three and four, the source of data to be gathered are systematically grouped into two categories : (i) sampling areas, and (ii) samples. The sampling areas have been proposed to collect data from 8 Teachers Colleges, one each from the 8 United Colleges randomly distributed all over the country; 24 co-operating schools, 3 each from the 8 selected colleges, and 24 villages, 1 each from the 24 selected associated co-operating schools where the TERD Project is in action. The samples of persons in the study consist of :

1. The product-personnels of the TURTEP, 3 from each area of the 8 selected colleges, but necessarily they should be working in the Teachers College only, and many of them are working in the educational offices of the districts.
2. All the administrative heads, viz. Rector, Vice-Rector in-charge, Project's Director and Head-Masters, 1 from each organisation.
3. Teachers College staff, 18 from each 8 selected colleges.
4. Student practice teachers engaging in their practice teaching, 6 students from each of the 24 selected community schools (co-operating schools).
5. School Head-Masters, 1 from each of the 24 selected schools.
6. Co-Operating teachers, 6 from each of the 24 selected schools.

7. Village chiefs, 1 each from the 24 selected villages.
8. Village people, 6 persons from each of the 24 selected villages.

III.5 POPULATION AND SAMPLE

Extensive data have been collected from different sources of the selected groups of sample population as mentioned above which is categorised in the following table (Table III.1). Table -III.2 illustrates the numbers and sample groups. Keeping in view of these sample population and persons, 7 instruments have been prepared for the collection of data.

III.6 INSTRUMENTATION

Several kinds of tools were prepared for data collection, and such tools are categorised as structured interviews, questionnaires cum opinionnaires some of which have open ends for the respondents to answer, and some are of rating scale.

In the process of preparation of tools, major concentration was paid to the utility of different kinds of tools with regard to various purposes of the study. All these tools were to take a final shape after passing through different stages of formulation. In the initial stage, taking into consideration different objectives of the study, all relevant aspects on which data were to be collected were critically studied. It was done by scrutiny of various literature pertaining to the Rural Teacher Education (The Thai-UNESCO Rural Teacher Education Programme - TURTEP) and related to the Teacher Education for Rural Development (TERD Project). The literature pertaining to the TURTEP

Table I

Sr. No.	T C
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1 Chie

2 Nako

3 Sakoi

4 Nako:

5 Petol
yaloi

6 Dhoni

7 Nakoi

8 Nakoi

includes the handbooks for TURTEP, annual reports and final reports of project's evaluation and various research literatures on different aspects of the TURTEP. While the literature related to the TERD project is the handbook for the TERD Project and other government records like official survey reports of the Department of Teacher Education, etc. Totally, seven tools were prepared comprising three structured interview schedules, two questionnaires cum opinionnaires, and two opinionnaires.

In the second stage of preparation of these tools, the prepared tools were presented before a group of experienced research workers consisting of one Professor of Education, one Reader in Education, One Senior Lecturer and two Senior Research Scholars of the Centre of Advance Studies in Education (CASE), M.S.University of Baroda. Various comments received from these experts were used to modify the tools covering different aspects mentioned in objectives of the study.

In the third stage, the tools written in english were translated into Thai and once again, after completion, were presented before the Thai experts involving in the Rural Teacher Education Programme. The Thai experts consist of (i) Chief of the Supervisory Unit and one of the educationists in the supervisory unit of the Department of Teacher Education Ministry of Education, (ii) Two Directors of the TERD Project of various Teachers Colleges, and (iii) three supervising staffs of the Teachers College. Various opinions and suggestions were used for the improvement of tools.

In the fourth stage, various well formulated tools were used to try out in order to see their effectiveness and validity at the Ayudhya Teachers

College, Sri Ayudhya United Colleges, Pranakornsriayudhaya Province. In this case, the present author has interviewed various administrators using the structured interview schedules. While the questionnaires/opinionnaires were distributed to the Director of the TERD Project, adjoining school Head-Master and co-operating teacher. The investigator has interviewed the village chief and few village people. This try-out was made in order to test the appropriation of the language used in the tools whether various aspects and items asked are easily answerable or not. After the completion of this try-out, some tools have been modified as per the data obtained through the feed back of respondents. Ultimately, the tools were reproduced and made ready for data collection. The details of the seven tools are as follows :

6.A Tool No. 1 : Interview schedule for the product-personnells of the TURTEP, formulated to meet the objective one of the study (see Appendix III). The aim of preparing this interview schedule was to know the perceptions of the product-personnells regarding the effect, problems and limitations of the project. This tool consists of three main statements. The first one comprises six aspects of the Rural Teacher Education useful to the trainees in carrying out rural educational activities. The second and third statements were asked for the information on limitations and suggestions for improvement of the project. This tool was developed for collecting data to substantiate the information gathered from various related literatures.

6.B Tool No. 2 : Interview schedule for Rector and Vice-Rector in-charge of the TERD Project (Appendix -IV). This tool was prepared in order to gather various informations on the main purpose of the TERD Project in each Teacher College, like the usefulness of the project in rural development,

problem faced pertaining to implementation, planning, organisation, personnels, physical facilities, budgetting, monitoring, student's participation and community involvement. Totally, there are three statements in this tool where by various difficulties were asked about the project mostly on administrative problems, project's management and its relevant to the institutional development as well as community upliftment.

6.C Tool No. 3 : Questionnaire cum opinionnaire for Directors of the TERD Project (Appendix V). This tool has been prepared to study the nature of the TERD Project in different aspects of course contents, planning, organisation, personnel, implementation, etc. of the project. Various questions asked have been prepared sectionwise comprising supply words or figures, yes or no, multiple choice and open ended. There are four sections in this tool.

Section :1 deals with personal data of the Director of the TERD Project, consisting totally of eight items like - sex, age, official position, educational qualification, in which faculty he belongs, teaching experience, work-load, and experience in supervising the TERD Project.

Section : 2 deals with various informations pertaining to opinions of the Director on the nature of the TERD Project related to ten aspects of management of the project. Each aspect comprise several items provided for answering as illustrated in Table : III.3

Section : 3 is of great importance and much relevance for the present study in the sense that an attempt has been made to get a comparative point of perceptions of different groups of personnel involved in the project

Table : III.3 Numbers of items in each one of the ten aspects.

Sr. No.	Aspects	No. of Items	Total
01.	Course Contents	1 to 10	10
02.	Planning	11 to 19	9
03.	Organisation	20 to 27	8
04.	Personnel	28 to 35	8
05.	Implementation	36 to 47	12
06.	Physical Facilities	48 to 53	6
07.	Budgetting	54 to 59	6
08.	Monitoring	60 to 64	5
09.	Student Teachers' participation	65 to 69	5
10.	Community involvement	70 to 73	4
Total :			73

like Teachers College's Staff, Head-Masters, Co-operating teachers, student practice teachers, village chiefs and village people. As this section consists of common items which are used to ask these various personnels in different tools all of which are structured rating scale type of questions where respondents have to tick mark the given columns (agree to - great extent - some extent - not at all) their perceptions on each every item. The total numbers and overall structure of this section is shown in Table : III.4.

Section : 4 deals with various perceptions related to problems and limitations of the TERD Project. It is an open ended tool, giving sufficient space to write down the points. There are ten aspects exactly the same as in section - 2. (Ref. Table - III.3).

6.D Tool No. 4 : Questionnaire cum opinionnaire for teacher college staff members (Appendix : VI). This tool is divided into three sections, viz. (i) Personal data as those for the Director, tool No. 3 - section : 1; (ii) Information pertaining to the nature of various implementations of the TERD project, and (iii) perceptions pertaining to the effectiveness, problems and limitations of the project.

Section : 1 consists of eight items related to personal information of the Teachers College's teaching staffs, i.e. sex, age, official position in the Teachers College, academic qualification, faculty in which respondent is working, teaching experience, supervising experience, teaching workload related not only teaching but includes various activities of supervision.

Section : 2 deals with various informations pertaining to implementation of the project. There are twenty seven particulars of items wherein

Table : III.4 Number of aspects and items in section-3.

Sr. No.	Aspects	No. of Items	Total
01.	Usefulness of the TERD Project to the Teachers College.	1 to 5	5
02.	Activities of the TERD Project can develop the rural school.	6 to 15	10
03.	Activities of the TERD Project help to develop the rural villages.	16 to 40	25
04.	The TERD project is helpful for student teachers.	41 to 50	10
05.	The TERD Project's course contents help student practice teachers to work effectively in rural schools and rural villages.	51 to 65	15
T O T A L :			65

Table : III.5 Distribution of items related to various aspects of the TERD Project.

Sr. No.	Aspects	No. of Items	Total
01.	Course Contents	1 to 2	2
02.	Planning	3 to 5	3
03.	Organisation	6	1
04.	Personnel	7 to 10	4
05.	Implementation	11 to 15	5
06.	Physical facilities	16 to 17	2
07.	Budgetting	18	1
08.	Monitcring	19	1
09.	Student Teachers participation	20 to 24	5
10.	Community involvement	25 to 27	3
T O T A L :			27

two items to be responded have been framed with simple questions and simple answers either (yes) or (no). The remaining other 5 items have been prepared in such a way that respondents can give answers by tick-marked any one of the three multiple choices (agree to - great extent, some extent, not at all). The twenty seven particulars asked are related to various aspects of the TERD Project as illustrated in Table - III.5.

Section : 3 aims to obtain various perceptions of the teachers college's staffs regarding the effectiveness and problems as well as limitations of the TERD Project. In this section, there are totally eighty five items related to various aspects of the project that selected for study, and the first 65 items are common as those applied to the Director, all the five aspects of Table - III.3 of tool No. 3. Whereas, the remaining 20 items are specially framed for the college staffs only, grouped as sixth aspect, seeking for informations pertaining to various problems and limitations of the TERD Project.

6.E Tool No. 5 & 6 : These two tools (see Appendix VII) are common tool used to seek information pertaining to five aspects of the first four which have been asked the Director of the project (Table - III.4 - items 2, 3, 4 and 5), while the fifth one, dealing with informations about problems and limitations of the project, is common but consisting of 15 items only instead of 20 items used to ask the Teachers College staff members (Tool 4 - section 3). The investigator has classified these tools in this manner because the sample groups have certain uncommon reaches where one group may not be sharing informations to others, mostly happening in schools and colleges. The tools Nos. 5 and 6 were designed to ask the school Head-Master/Cc-operating teachers and student practice teachers respectively.

These sample persons are certainly not familiar with various problems commonly appeared in the Teachers College, and the Director as well as Teachers College's staff members, to certain extent, do not aware some problems faced by the school teachers. Likewise, the aspect No.3 of Table III.4, dealing with various activities of the TERD Project helping to develop the rural vaillages, is common to all the five groups of samples, viz. Director, College's staff memembrs, Head-Masters/co-operating teachers, student practice teachers, village chiefs and village people.

6.F Tool No. 7 : This tool is an interview schedule applicable to village chiefs and village people, dealing with informations about the usefulness of the TERD Project in the development of rural villages (see Appendix VIII). It consists mainly of two aspects - (i) activities of the TERD Project, and (ii) personnels of the TERD Project. In the aspect one, there are 25 items and are common with those tools Nos. 3, 4, 5 and 6 pertaining to the same aspect. The second aspect is completely different, asking for informations about the personnel of the TERD Project. It consists of seven items. The structure of this tool is also of rating scale type, but used to tick-marked by the candidate himself on receiving answers by interviewing the samples.

All the seven tools described above, are enclosed in the appendix section of the thesis (Appendix 3 to 8).

III.7 DATA COLLECTION

Using the above described instrumentation, data were collected spending

maximum times of 18 months, i.e. started from October, 1985 to March, 1987. It took this much time as the investigator has personally gone every where of the eight selected Teachers Colleges, twenty four co-operating schools and 24 associated villages involving in the TERD Project. There are two main steps of approaches in the process of data collection which the present investigator was strictly followed. In all his eight sampling areas, wherever he went, at the first step, he has personally met the administrative heads of the institutions (Rector, Vice-rectors in-charge, Director of the project), as well as all other sample persons not only in the Teachers Colleges, but also in the schools and villages where TERD Project activities are going on explaining them his research objectives and exploiting various possibilities to get maximum help in responding their true perceptions and authentic expressions of all their feelings. At the second step, after personal discussions with various officials in the colleges, the questionnaire/opinionnaires (Tool Nos. 3 & 4) were distributed to the Directors of the project and the college's staff members giving them sufficient times for completion. Regarding the Rectors and Vice-Rectors in-charge, the investigator has taken an advance appointment before the interview. At many occasions, the investigator has used the tape recorder to record various discussions he has with the Rectors and Vice-Rectors when these authorities wanted to express their feelings which are outside the structure interview schedules that are relevant to the TERD Project's management and activities. Various TURTEP product-personnels, old and new, have also been interviewed and many occasions the interview was held during lunch break when discussions were lasted more than expected. At these occasions authentic perceptions pertaining to various informations have been received.

The present investigator has changed his data collection strategy, while collecting data in schools and villages. Since the investigator has worked as Director of the TERD Project for nearly a decade in his Teachers College, he at the first step has met the Head-Master of the school discussing various problems about different activities of the TERD Project encountered by him in his 10 years experiences in the field of Teacher Education for Rural Development. As he used to do, during his 10 years experiences, as a Director of the project and experienced supervising teacher of his college, he has requested the school Head-Masters to organise a special gathering of school teachers, student practice teachers, village chiefs and village people to listen him talking about various plus points of the TERD Project. This arrangement was made in order to highlight the important of using handbook for the TERD Project while monitoring its activities in the sense of rural development. In the summary of his talk, he has introduced the importance of his visit, the objectives of his research and other important themes in responding various items in the questionnaires/opinionnaires he was going to distribute to them in the end of the gathering. Using this method of data collection, he has received maximum return from all the groups of samples. He has further, after the gathering, fixed a non-formal meeting with the village chiefs and village people for the next day where he wanted to talk to them about how to gain maximum utility of the project in the development of their villages. Various advise has been given to them and at the same time has also interviewed them using his structured interview schedule (tool No.7). In this way of approaches for his data collection, he has also received maximum attention from village chiefs as well as village people. It was so because, during his meeting with village people, he has taken along with him several student practice teachers to expand various



Plate III.1 : Student teachers engaging in plantation of vegetables under the TERD Project development programme as part of the school activity as a model school for rural development.



Plate III.2 : Student teachers preparing the water pot for storing the drinking water in a more hygienic way. Such activity is a part and parcel of the TERD Project activity in the schools and villages.



Plate III.3 : School children engaging in plantation of vegetables using the school ground during the outside class activities of the children under the TERD Project developmental programme, supervised by student teachers.



Plate III.4 : School children on their routine work of watering the vegetables planted by them during pre-school and post-school hours.

activities which have not been put into practice prior to his visit. All these various activities, initiated by him, are illustrated in the following Plates (pl. see captions for details of the activities).

Using the above described ways of data collection, applicable to all the eight colleges, associated co-operating schools and villages, the present investigator has spent one and half years for his data collection. In addition to data collected through various structured interview schedules and questionnaires/opinionnaires for statistical analysis, he was using a field diary to note down various important points of observations observed by him during his tour for data collection across Thailand.

III.8 DATA ANALYSIS

The analysis of data is divided into two main phases as : (1) Analyzing the historical perspective evolution of the project through various reports and documents of various organisations/institutions and research work carried out by various individuals involving in the project, and also the data collected through structured interview schedule responded by different product personnels of the TURTEP produced since the initial stages till the end. In the former case, pertaining to evaluation of documents, the summary has been drawn highlighting various successful aspects and different problems faced throughout its historical activity. Whereas, in the latter case, the data collected were used to calculate the percentage of frequency of perceptions appeared in each items answered by various respondents. (2) The second phase covers all the remaining three objectives for which tools nos. 2, 3, 4,

5, 6 and 7 were used to collect the data from 10 groups of sample persons for the analysis. In this case, percentages have been calculated to determine the frequency appearance of perceptions expressed by respondents belonging to different groups of sample. This is done in order to differentiate the fluctuation of perceptions of the respondents. The data obtained from Rectors and Vice-Rectors in-charge as well as the first three sections of the tool No.3 are all interpreted in terms of percentages. Whereas, the remaining parts of data, tools Nos. 3 (section 4) 4, 5, 6 and some parts of 7, were analysed by using the Chi-square test in order to measure the differences of perceptions whether significant or not significant. Recall back to the discussions preparation of tools, described earlier, that five aspects in Table III.4 consist of several items commonly used to ask different groups of sample persons from Directors to villagers, having the total numbers of 632 persons. Perceptions of these 632 persons do show some differences in every items asked. To test these differences, the Chi-square method of statistical analysis seems appropriate.

Best (1977) has stated the Chi-square test (X^2) is a test of independence with the idea that one variable is not affected by, or related to, another variable. The X^2 is not a measure of the degree of relationship. It is merely used to estimate the likelihood that some factor other than chance (sampling error) accounts for apparent relationship. Since the null hypothesis states that there is no relationship (the variables are independent), the test merely evaluates the probability that the observed relationship results from chance. The computed X^2 value must equal or exceed the appropriate X^2 table critical value to justify rejection of the null hypothesis or the assumption of independence at 0.05 or that 0.01 level of significance. A significant X^2 finding indicates that the variables probably do not exhibit the quality

of independence, that they tend to be systematically related and that the relationship transcends pure chance or sampling error.

Garrett and Woodworth (1981) in their book on statistics in psychology and education, have stated that the more closely the observed results approximate to the expected, the smaller the χ^2 and the closer the agreement between observed data. Contrarywise, the larger the χ^2 the greater the probability of a real divergence of experimentally observed from expected results.

In the present case, we test the differences of perceptions of different groups of population responding to the same aspects of the TERD Project and the same items of questions requested to respond. Since the data collected by the present investigator comprise of several groups of population, the Chi-square method to be used as the χ^2 test of independence in contingency table described in Garrett and Woodworth (1981, pp. 262-264). Of course, it is depending upon the degree of freedom which relies on the number of row and numbers of columns of the contingency table designated for χ^2 computation. The details of this Chi-square method, analysis and interpretation will be presented in the next chapter illustrating the pattern of χ^2 calculation and the outcome results of the data.