CHAPTER II
2.1 WORKING HYPOTHESES

2.1.1 Rural Development Programme envisages all sided development of villages. Necessarily the programme will have to follow a multipronged approach for the development of men and material resources in villages. To fulfil these objectives adequately trained personnel must be available in the area on all aspects of development.

Issue: Whether adequately trained personnel are available in the area to attend to all schemes of rural development?

HYPOTHESIS: Adequately trained personnel might not be available in the area to attend to schemes of rural development such as agricultural engineering, water management, Post-harvest technology, dairy, and poultry development, rural industrialisation, extension methods, social education, social forestry and bio-mass, renewable sources of energy and development of rural communication, because of the \textit{ict} thai. Nag a J. and a \textit{t}.Lai tuul statehood only in lieu and the State missed three Five Year Plans.
2.1.2 The planning process must take account of the felt needs of the areas and the staff who are involved in planning and execution of the schemes must be oriented to the felt needs of the areas; and therefore training and orientation to the staff must be organised locally. This will make the programmes more effective.

Issue: Whether training facilities are made available locally to the staff of the development departments?

HYPOTHESIS: Training facilities would not be locally available in adequate measure to the staff of the development departments as it is a new State and it could not plan along with other States during the first three Five Year Plan periods.

2.1.3 All the development departments are to work together to achieve the goals set by the planners under the Integrated Rural Development. For this purpose at the district level the Deputy Commissioner performs the role of a co-ordinator and the Block Development Officer Co-ordinates the development programmes at the block level. The success of the Integrated Rural Development Programme lies on the co-ordination at these two levels.
Issue: Whether the schemes of the development departments are being co-ordinated by the rural development department at the area level and at the district level?

HYPOTHESIS: The schemes of the development departments might not be effectively co-ordinated by the rural development department at the area level and at the district level as the Deputy Commissioner is directly administering the process of Co-ordination.

2.1.4 Each development department at the time of appointment of staff is expected to take candidates who are qualified in the subject to suit to the requirements to the jobs. And all subjects and all such departments may be related to the development of the rural areas. Therefore, the specialised departments need to train their staff on the basic principles of rural development and on the nature of village communities, without which co-ordination work becomes difficult.

Issue: Whether the specialised departments arrange any training to the staff on the basic principles
of rural development?

HYPOTHESIS: Specialised departments* have not arranged any training to the staff on the basic principles of rural development as the integrated approach is not effectively followed at the block level.

2.1.5 The Key-personnel who attend to the process of planning, co-ordination, monitoring and evaluation are expected to be trained in the respective process without which the process can not be effective.

Issue: Whether the key personnel in the development departments are trained for their job?

HYPOTHESIS: The key personnel in the development departments are adequately trained for their jobs as the NIRD Regional Centre is located in Gauhati – Headquarter of Assam and NIRD is mainly concentrating on the key personnel.

* Specialised departments are those who are engaged in a particular branch of activity such as agriculture, animal husbandry, industries, health, education, women's welfare, energy, transport etc.
2.1.6 The training programmes arranged for the personnel of rural development work must be based on the job-requirements of the personnel. Otherwise the training becomes less useful and the performance becomes less effective and objectives of the schemes can not be fulfilled.

Issue: Whether the training and orientation programmes arranged for the personnel go with their job requirements and the nature of the schemes?

HYPOTHESIS: The training and orientation arranged for the personnel may go with their job requirements and the nature of the schemes as the NIRD a specialised agency is involved in the process.

2.1.7 When new schemes are introduced the personnel are to be equipped with new knowledge and skill, otherwise the schemes can not bring the expected success.

Issue: Whether training/orientation programmes are arranged to impart new knowledge and skill to the personnel whenever new schemes are introduced?

HYPOTHESIS: Training and orientation programmes may be arranged to impart new knowledge and skill to the personnel whenever new schemes are intro-
duced for making such schemes more effective and successful.

2.1.8 For specific departmental work and specific schemes, the State Government is expected to arrange training for the personnel. The success of the schemes depend on the training imparted to the personnel.

Issue: What kind of training programmes are arranged by the State Government? And what trainings are arranged to the personnel to run the centrally sponsored schemes? Whether it is adequate to meet the demands?

HYPOTHESIS: The training programmes arranged by the State Government may be adequate to meet the requirement of the centrally sponsored programmes.

2.1.9 Rural Development programme can not be successful without people's participation in it. People's participation can be secured only through local leaders.

Issue: Whether local leaders/People's representatives are involved in rural development programmes? If so, how?
HYPOTHESIS: Local leaders and people's representatives may be adequately involved in rural development programmes as introduction of Village Development Boards envisage better involvement of local people.

2.1.10 Forming councils and sub-committees with local leaders for planning, co-ordination and implementation of rural development programme(s) is one of the methods of securing people's participation in rural development programmes.

Issue; Whether any such committees are formed at the Village, Block and District levels?

HYPOTHESIS: Specialised functions such as planning, Co-ordination, implementation and evaluation must have been more effective in the district because of formation of village, area councils and sub-committees.
2.2 OPERATIONAL DEFINITIONS OF Till- CONTENTS USED IN THE STUDY

2.2.1 Manpower Resource Inventory:

The 'Manpower-resource inventory' includes the personnel of different Government departments and the Non-Government institutions working for rural development or engaged in rural development programmes at the village, block and district levels. The departments include the Department of Agriculture, Animal Husbandry, Industries, Khadi and Village Industries, Health, Education including Adult Education, Social Welfare, Transport and Communication. The Non-Government Institutions include organisations registered under Societies Registration Act (Nagaland Act 14 of 1969) unregistered clubs and church organisations,

2.2.2 Rural Development

Rural Development can be described as a process of change from the traditional ways of living of the rural communities to the modern, progressive and scientific ways of living, a method by which people can be assisted to develop themselves on their own capacity and resources; a programme for accomplishing certain welfare activities in
rural communities; a movement with certain ideological and emotional content. In this context the rural development programme includes research, planning, co-ordination, extension, implementation of specific projects and evaluation of programmes. Such programmes may further be enlisted as programmes implemented directly by the Departments of Rural Development, and such other associated State Government Departments, like Agriculture, Animal Husbandry, Industries, Health, Education, Social Welfare, Public works, Transport and Communication. It also includes the programmes specially sponsored by the Government of India and implemented by State Departments.

2.2.3 The Study

Study means 'the Study of Man Power Resource Inventory for Rural Development in Kohima District, Nagaland'.

2.2.4 Study Area

The study area means the Kohima District where from the data were collected.
2.2. Village Council.

A village council is a statutory body created by an Act of the State Legislature (Nagaland Act 2 of 1971). Every village having a population of not less than one hundred shall have a village council. A village council shall consist of members chosen by the villagers in accordance with the prevailing customary practice and usages, the same being approved by the State Government. The village council will choose a member as Chairman of the council.

2.2.6 Village Development Boards

The Village Development Board means a statutory Development Board at the village level constituted under clause 12 of section 12 of the Nagaland village and Area Council Act 1978. The Village Development Board shall, subject to such directives as the village council may issue from time to time, formulate schemes, programmes of action for the development and progress of the village as a whole, or groups of individuals in the village, or for individuals in the village, either using the village community or other funds. The members of the Village Development Board shall be chosen by the village council.
2.2.7 Area Council

The Area Council means a statutory body created under the Nagaland Act 2 of 1971 (Nagaland Village, Area and Regional Councils Act). The area council shall consist of members elected by the village council in the ratio of one member for a population of 500 and part thereof not below 250. There shall be a Chairman elected from among the members of the Area Council.

2.2.8 Regional Council

A Regional Council is a district level statutory body created under an Act of the State Legislature (Nagaland Act 2 of 1971). The Regional Council shall consist of one member from every 6000 population, and two persons to be nominated by the State Government.

2.2.9 The District

The District means the Revenue District of Kohirna which was chosen as the study area.

2.2.10 District Planning Board

The District Planning Board means a statutory Board
created by an Act of the State Legislature to advise the planning, implementation, co-ordination, financing and monitoring of the development programmes carried out in a revenue district. The Deputy Commissioner of the District is the ex-officio Chairman of the board. Members of the Nagaland Legislative Assembly having jurisdiction in the district, or whose constituencies fall within the district and the Chairman of Area Councils in the district are the members of the board. The District Officers of different development departments attend the meeting of the Board for the purpose of assisting the Deputy Commissioner with information.

2.2.11 State Government

The State Government means the Government of Nagaland

2.2.12 Personnel

Personnel means any person (a man or a woman) appointed by the State Government Departments or by Non-Government organisations to undertake rural development work in the Kohima District i.e. the study area.
2.2.13 **Training**

Training means any organised programme for imparting new knowledge and skill to the personnel appointed for a specific purpose under a specific scheme or departmental work. Such training include periodical orientation, participation in seminars, symposia, presentation of papers in study circles, and study tours.

2.2.14 **Village Level Worker**

The village level worker means a person appointed by the State Government to assist the extension agency at the block level in implementing rural development programme under the guidance of a Block Development Officer.

2.2.15 **Extension Officer**

The Extension Officer means the Officer appointed by the State Government to carry out extension work under a development department in rural areas either under the control of the Block Development Officer or under the control of the concerned department.
2.2.16 **Block Development Officer**

The Block Development Officer means an officer appointed by the State Government who is in-charge of a community Development Block under the control of the Rural Development Department of the State Government.

2.2.17 **Project Officer**

The project officer means an officer appointed either by the State Government or by the Government of India to implement a specific project which includes one or more schemes with definite budget outlay.

2.2.18 **Sub-Divisional Officer**

The Sub-Divisional Officer means an officer appointed by the State Government to work under a department of the State Government with definite jurisdiction within the revenue district.

2.2.19 **Additional Deputy Commissioner**

The Additional Deputy Commissioner means an officer working under the Deputy Commissioner of a revenue district either at the district level or at the Divisional level with definite jurisdiction of area of operation.
2.2.20 Deputy Commissioner

The Deputy Commissioner means an officer in-charge of a revenue district appointed either from the Nagaland Stage Service or from the Indian Administrative Service who is not only expected to co-ordinate the development programmes of the district but also expected to maintain law; and order in the district. In certain States of India such Deputy Commissioners are designated as District Collectors.

2.2.21 Director

The Director means an officer of the State Government appointed to direct a branch of activities of the State Department of Agriculture, Department of Animal Husbandry, Department of Industries, Department of Health Services, Department of Education, Department of Social Welfare and Department of Rural Development and such other departments.

2.2.22 Project Director

The Project Director means an officer of the State Government appointed to be in-charge of the State Rural Development Agency to operate special and priority schemes.
2.3 SOURCES OF INFORMATION

The study in Kohima District began with seeking out a variety of sources: 1. documentary sources, official and unofficial statistics, local newspapers, census publications - from which descriptive materials were derived, 2. personnel sources were of two kinds - firstly, they included professional persons in the field who had knowledge and insight into the data desired, secondly, public leaders who are directly involved in planning, co-ordination, implementation and evaluation of rural development programmes, 3. library sources which guided in the accumulation of pertinent data.

Notes were taken on separate sheets of paper which facilitated easy arrangement and rearrangement in subsequent classification and analysis of the data.

The documentary sources of information were those which were contained in the published and unpublished documents, reports, statistics, manuscripts, circular letters, and so on. These sources could be generally divided into primary sources, which provide data gathered at first-hand, and secondary sources which provided data that have been transcribed or compiled from original sources. Data from pri-
mary sources were gathered by participant observation, personal interview, conference, seminar, correspondence and questionnaire. The sources of secondary data are cited in footnotes or bibliography.

The official documents and statistics were carefully scrutinized whether they were the primary source of materials or based on secondary source of materials.

Under the category of official documents and statistics the following were referred to:

A. The census report of the district.
B. Basic statistics published by the Department of Publicity, Nagaland Government.
C. Reports & Proceedings of the State Government, Departments, District offices, Block Development offices.
D. Reports of the Department of Economic Statistics, State Boards and Semi-Government Institutions such as State Rural Development Agency and Co-operative institutions.
E. Research studies and project reports of the North-Eastern Hill University Extension Centre, Kohima.
F. Legislative sources

The unofficial documents and statistics include:

A. Reports of councils of social agencies including private social welfare agencies such as trusts.
B. Reports of the chamber of commerce and industrial estates.
C. Report of the character-building and religious agencies.
D. Accounts in newspapers in current numbers.
E. Minutes of the civic bodies on local problems.
F. Photographs, Photostats available with Field Publicity Office or the District Publicity Office.

The sources of data in rural areas were more limited than in urban areas. Records, reports, and other sources of secondary information were scarce in rural communities i.e. in Village C. ur.:ils and Village Development Boards, where public and private organisations could only depend upon unpaid and often untrained clerical assistance. The enquiry in rural areas (villages), therefore needed enumeration, interviewing, and other direct approach (observations) with all advantages and pit falls that these methods entail.
2.4 COLLECTION OF DATA

2.4.1 At the State level the Director of Rural Development, Project Director of State Rural Development Agency, Director of Agriculture, Director of Animal Husbandry, Director of Industries, Director of Health Services, Director of Education, Director of Higher and Technical Education, Director of Social Welfare, Chairman State Social Welfare Advisory Board, Chief Executive Officer, State Khadi and Village Industries Board, Regional Director, All India Khadi and Village Industries Commission were personally interviewed, and wherever necessary their subordinate officers in the Directorates and the Boards were also interviewed.

2.4.2 At the District level the Deputy Commissioner, Kohima District, the Additional Deputy Commissioner, Sub-Divisional Officers of Agriculture, Animal Husbandry, Industries, Health Services, Social Welfare, Inspector of Schools were personally interviewed.

2.4.3 At the Block level the Area Council Chairman, Block Development Officers, Extension Officers, and the technical staff who are concerned with the field work were interviewed. (The details of discussion with the technical staff
of each department is given in the analysis and interpretation of data).

2.4.4 At the village level, the village level workers who are attached to the Block Development Officers, were personally interviewed. Information from the village council Chairmen and Secretaries of Village Development Boards were collected through a questionnaire mailed to them.


2.4.6 Research studies so far conducted by the North Eastern Hill University, NEIIU, Shillong and the NEHU campus, Kohima, Indian Council of Social Sciences Research, North Eastern Regional Centre, Shillong, National Institute of Rural Development, Regional Centre, Gauhati were gone through. Studies conducted by the Indian Council of Agricultural Research, Medzephema Centre also were referred.
2.4.7 Books, journals and reports available in the Gandhigram Rural Institute were referred to, and the professors in the Institute were consulted.

2.4.8 Regarding the theoretical models on rural development the libraries of the following institutions viz., the Gandhigram Rural Institute, Regional Centre of the Indian Council of Social Science Research, Shillong, The National Institute of Rural Development, Rajendra nagar, Hyderabad and its Regional Centre at Gauhati were consulted. The District Library in Kohirna also was made use of. Visits were made to the Social Sciences Documentation Centre, New Delhi.'

2.4.9 A seminar was organised by the researcher at kohirna on Rural Development in which the manpower and training needs of different development departments were discussed. District level and state level officers of different departments of the Nagaland Government attended the seminar and gave their opinion. The Minister of Finance, Government of Nagaland, the Vice-Chancellors of North Eastern Hill University and the Gandhigram Rural University were involved. Representatives of two Voluntary institutions in Nagaland participated and gave their experience on the topic of study.
2.4.10 The District Planning Board meetings in Kohima and the Area Council meetings of the four Area councils in Kohima District were attended by the researcher and the issues relating to the study were discussed with the members of these bodies.

2.5 TECHNIQUES FOLLOWED IN THE STUDY

2.5.1. Observation techniques used and conditions under which observations were made

'Observation may be defined as systematic viewing, coupled with consideration of the seen phenomena. That is, consideration must be given to the larger unit of activity in which the specific observed phenomena occur. Not all phenomena, of course, are open to observation; not all those open to observation find a ready observer at hand. But one can hardly think of an empirical study in which some observation had not been made.'

i) Observations based on hypothesis

Generally, the formulated hypothesis is the guiding element in the immediate observation. The following are
some of the observational lines based on the hypothesis formulated under the study.

A. Who are the field personnel often found in the field during the visits of the researcher?

B. What are the innovative activities frequently or widely found in the field?

C. What are the training centres and training facilities on rural development available in the State for visits and observations of the researcher?

D. What are the functions observed where the staff of more than one department co-operate together and organised the work jointly?

K. What are the phenomena observed in the field where missing links of coordination were detected.

V. Whether certain phenomena were observed in the field which are beyond the knowledge and capacity of the personnel in the field?

G. Whether the public leaders or elected representatives effectively participate in meetings where certain decisions are taken.
H. Whether meetings of sub-committees in the field were observed?

I. Whether any situation wherein the higher level executive or subject specialists positively or negatively commented about the performance of the field staff observed by the researcher?

ii) Indicators to facilitate observations based on the above guide lines.

The following Indicators were fixed to systematise the observation process:

A. Demonstrations in the field conducted by the field personnel.

B. Availability of field personnel in their own key villages or headquarters-residing and guiding people,

C. Attendance of people's representatives in meetings of Village Development Board, Village Council, Area Council and District Planning Board.

D. Actions of voluntary institutions in rural areas.
E. Frequency of visits of officers to the villages.

iii) On observing the situations the following criteria were made:

A. Definite objectives of observation

ii. Observing larger setting within which specific acts occurred.

C. Adequate description of the characters of social atmosphere of observed situations.

D. Co-ordination of elements within the context of a particular situation.

K. Carefully planning the techniques without resorting to chance, random, and inconsistent procedure.

F. Recording the data or observation, evidences without bias or unduly relying on memory and recall after a risky delay.

G. Subjecting the observations to scientific tests and comparing them in a systematized way with those of other researchers.
II. Using precision instruments with a view to quantify the data.

I. Integrating the observational techniques with other suitable exploratory techniques in the research process.

While observing situations care was taken to see that no question was asked to know why and how, because any question to avoid bias will lead to behavioural change of the observed individuals, and correctness or accuracy of observational data will be lost. Professor Edward Lindernan says, 'if you wish to know what he is really doing, watch him, don't ask him'.

The researcher was living four and half years in the study area and was an intimate participant in the life of the Nagas in their residential houses, offices, meetings, on the road, in the lodging houses of towns. Systematic observation in Naga hill areas could be possible only by sacrificing a reasonably normal life of an outsider.

iv) Noncontrolled and nonparticipant field observations made

A. The researcher attending the meetings of the District Planning Hoard, Area Council, Village Council and Village have I opniuit Mourd; under this category. As these bodies have a definite meeting agenda, the researcher could only observe how and to what extent the people's representatives participate in the deliberations of the meetings.

B. The researcher made extensive tour in the district to observe the cultivation pattern, animal husbandry practices, industrial centres, craft centres, Primary health centres, schools, circle, sub-divisional, divisional, district offices and understood how much the local citizens are participating or involved in the development process.

V. Child welfare centres were visited and the performance of the staff and their voluntary nature, knowledge and skill were understood.

D. Women's clubs in the area were visited and the participation of women leaders in the club activities were understood.
E. The Gobar-gas plants were visited along with the supervising staff and the instructions to users observed.

F. Under the horticultural department, centres in the study area related to nurseries, distribution of seedling, conducting demonstrations in model farms were visited and observations were made.

G. Forest nurseries and their plantation areas were visited, and observed the pattern and performance on the staff working under the schemes.

II. Match, leather, carpentry units of the State Khadi and Village Industries Board at Dimapur were visited, and observed the kind of training imparted to youths and the involvement of persons from Naga Communities.

I. Some of the rural roads constructed under the financial assistance of the State Rural Development Department also were visited and observations were made regarding availability and utilisation of manpower.

J. Production and sales centres of the voluntary institutions were visited and observations were made on
the capacity of such institutions in utilising manpower and taking up such economic welfare programmes.

v) Non-controlled participant observations in the field

'The participant observer shares, to lesser or greater degree, the life or the activities of the observed group. This sharing may be intermittent but active contacts at close proximity afford intimate study of persons.

A. Two seminars on Rural Development were organised by the researcher and he invited the key-personnel of all the development departments at the state level as well as at the district level. The researcher also participated in the seminars and observed the mode of thinking, attitude and reactions of the field personnel of development departments.

B. The researcher participated in the discussions of the District Planning Board in two of its meetings. These discussions were related to formulations of district plans. In the process of suggesting certain

approaches to planning at the district level the researcher observed the reactions of the members.

C. Three times discussions were held with the Minister of Planning of the Government of Nagaland on micro-level planning and the need for training the personnel on the new methods of planning process and the reactions of the Minister was observed.

D. On three occasions discussions were held with the Minister of Rural Development in his chamber and the training programmes for the personnel implementing rural development programmes were emphasised and the reaction of the Minister was observed.

E. The researcher met the Chief Minister 4 times at his chamber and discussed the training programmes for the personnel of rural development programmes and observed his reactions.

F. The researcher met the Governor of Nagaland and discussed the feasibility of certain training programmes for unemployed youths and observed the comments of the Governor.

G. The researcher himself organised four training
camps in Dirnapur, Wokha, Zunheboto and Mokokchung for village youth leaders on rural development under the assistance of the Ministry of Education, Government of India and observed the attitude of the youth leaders.

H. The researcher himself was a member of a State Level Committee constituted by the Government of Nagaland to initiate action for setting up a separate university for Nagaland and in the process of action for a separate university the researcher had several opportunities to discuss with the experts, university authorities, Ministers on the nature of education to be imparted to the youths for enabling them to become innovative leaders in rural areas for implementing rural development programmes.

vi) Observation and Insight

For making the study more meaningful it was necessary to see the cultural values behind a person or a group. The cultural values in Nagaland are to a great extent different from the rest of the country. Even among the Nagas there are seventeen tribes each one speaking its own dialect. Nagani, a mixture of Hindi, Assamese and local dialect is
growing slowly as a common dialect in Nagaland in the last few decades. Though the Nagas are said to belong the Mongoloid race their origin is traced from different directions and they had lived in isolation for several centuries. Among those tribes their tradition, customs, habits, folk ways, mores have been different and still such differences continue. Based on the social and geo-physical conditions, their knowledge, aspirations, achievements are also different. While studying the personnel and their resourcefulness to carry out welfare programmes the above socio-cultural, geo-physical conditions were taken into account and observation techniques were highly useful to get insight into the problems related to the study.

vii) Controlled Observation

In the last two to three decades several precise observation techniques have come into use one way screens and mirrors, movement recorders, sound recorders, rating scales etc. An observation schedule is one of such techniques. A structured observation schedule was used to record the group action and leadership behaviour in women's clubs, council meetings, and leadership camps. As far as this study is concerned the controlled observation does not
mean any experimental procedure as the nature of this study is not purely behavioural. The construction of observation schedule involves many procedural difficulties. The schedule was so devised as to provide an optimum of verifiable, quantifiable data and to avoid selective bias and misinterpretation of observed behaviour. The units of observation was made to be simple, minute, and meticulously worded as they were to level themselves to precise and uniform recording. The fragments produced by segmentation of behaviour into minute units were reconstructed into an integrated whole as the process of behaviour had to be interpreted. Adequate care was taken in the observation process and no general conclusion was drawn from isolated units. But such isolated units of behaviour were taken into account in whichever way they could reveal and supplement the other data. While observing the process of interaction in a meeting, alternative methods of recording had to be used.

viii) Crucial points in participant observation

As many Naga political leaders of regional character preach 'Naga Nationalism', the feeling of Naga and Non-Naga is so deep in the minds of many Naga men and women including village leaders and Naga Government Officials. As the
underground movement is widespread and strong rooted in Nagaland for the last three decades on many occasions suspicious attitude and covert behaviour was noticed while they talk to a Mon-Naga Officer, who is not very familiar to thorn. Even in the case of known officers certain reservations were observed while eating together as the food habits of Nagas are different from rest of the people of plain states.

2.13.2 Schedules and questionnaire used and conditions under which information were secured

Webster defines a schedule as "a formal list, a catalog or inventory", and it may be added that it is a counting device, used in formal and standardised inquiries; the sole purpose of which is aiding in the collection of quantitative cross-sectional data. Two different types of schedules were employed in the study-one to elicit information from the state level authorities of development departments; another to be filled in by the field staff who implement rural development programmes. In the case of first one the researcher himself filled in the schedule as it was more comprehensive and the questions needed interpretation. Both were in the nature of interview schedules. (Schedules are
classified as observation schedules, interview schedules, rating schedules and document schedules). The interview schedule of both the kinds demanded observation, rating to study the situations. It was observed that the tool cannot be purely of one type. And it was also found that different types of tools were mutually supporting. The schedules consisted of questions, statements of alternative answers, tabulation schedules and evaluation schedules.

The questions in the schedules included closed-form questions and open-ended questions. In case of closed-form questions the respondents were asked to mention the one out of the supplied responses which could approximate the situation.

Under the open-ended questions the respondents were free to express spontaneously and the replies to a particular question posed to him were not limited. A set of questions were posed to the resource persons of a seminar on 'Manpower and Training Needs for Rural Development' organised by the researcher for the purpose of the study and the participants were asked to express their viewpoints, describe their relationship, attitude, indicate their problems, and report on details and events without restrictions.
The open-ended questions had their own limitations. Since they were not restricted a wide range of answers were given, some were to the point and some meaningless. Though nondirected questions could not be avoided in the study, they posed a lot of problems of classification and analysis. The open-ended questions were immensely useful where the primary information had to be developed in qualitative nature. Open ended questions were used as an exploratory tool to facilitate formation of opinion on certain issues.

Structured questionnaires were used both to initiate a formal inquiry and also to supplement and check data previously accumulated.

Unstructured questionnaire was also used as interview guides on areas related to agriculture, animal husbandry, industrial extension and health programmes for coverage of new information on which no opinion could be made before the study. Flexibility was the main advantage of the unstructured questionnaire which facilitated to obtain view points, opinion, attitudes and to show interconnection between data which might escape notice under more mechanical types of interrogation. The object was to give the respondent maximum opportunity to reveal how he arrived at or developed the opinion while putting forth his view point. Wherever opin-
ion was not formed before and the other man's opinion was sought to understand certain phenomena, no check list with predetermined responses were provided. Unstructured questionnaire was useful to inquire into group activities such as construction of approach road to the village, foot-steps to streets, drainages and community forestry. Similar questionnaire was very useful to get the opinion of the farmers on artificial insemination to animals, the success or failure of the scheme and the skill of the staff to train the farmers on new schemes.

Much careful attention was paid to construct effectively worded questions. The language used in the schedule and in the questionnaire was simple, concise and directed towards making the respondents easily understand the requirements of the research by once reading the questions or statements. The words were chosen in such a way that they were within the grasp of the least intelligent among the respondents. Questions were straightforward in short sentences. Phrases and expressions known only to certain sections of the population were avoided. Professional jargon and technical words were not used with the lower level field staff of general administration. It was also noticed that at all levels the respondents who don't under-
stand the question at the first instance preferred to give any answer they knew rather than to tell the researcher that they could not understand the question. In all such cases the questions were further explained to their understanding. While constructing the closed form questions adequate care was taken to see that it was not easy for the respondent to say 'yes' with one choice. In such questions, enough choices were mentioned, and made sure that it was nonleading.

In each question the units of reference were built into the questions themselves. For an example "How old were you on your last birthday?" instead of "How old are you?" Similarly "what is the highest grade you completed in the school? or degree class in the college?". This made the question more specific and self explanatory. Subjective words, such as "bad", "good", "fair", and the like were avoided. In such necessities more descriptive terms were used for subjective ratings.

Questions on controversial issues were broken down into components, so that the respondent's feelings can be determined in clear terms. A series of questions were asked in order to obtain adequate information on all sides of an issue.
When it was necessary to understand the intensity of feeling or conviction to what extent the attitude of the respondents were crystalized towards the subject, supplementary questions such as 'why', 'what', 'when' and 'how' were asked to bring out specific answers to the questions.

Adequate care was taken to see that the required answers were within the informational scope of the respondent.

For the purpose of motivating the respondents, easiest and interest-catching questions were placed in the beginning of the questionnaire. Questions related to each period of time were grouped separately for facilitating the respondent, so that, the respondent need not be forced mentally to jump from one period of time to another. Similarly questions related to each subject such as agriculture, animal husbandry, industries, health, education, social welfare, public works, rural energy, communication and transport were grouped for maintaining the subject matter sequence and to avoid unnecessary repetition.

The questionnaire was pretested to find out whether it could draw consistent or definite responses. Unnecessary questions were eliminated before circulation. The pretest-
ing provided scope for identifying new aspects of the problem which were not anticipated during the planning stage.

In the case of the mailed questionnaire a covering letter explaining the purpose of study was used. And the nature of study also was indicated in the covering letter. In those cases where the questionnaire is not properly filled in follow up letters were mailed and replies obtained.

Transcription sheets were used as intermediate tools for preparing materials from questionnaire and schedule.

2.5.3 Techniques employed in Interviewing

Interviewing was not a simple conversation between individuals. Interviewing as a tool of research enabled the researcher to study the gestures, glances, facial expressions and pauses of the respondents which could reveal subtle feelings. A minute change of facial expression, a slight tensing of a muscle, the flick of an eye, a trace of a change in one's voice, a slight change in emphasis, a slight change in one's rate of speaking, slight hesitancies in answering the question, one's choice of words, one's
spontaneity in reply were observed by the researcher while interviewing the respondents and such observational data facilitated in forming opinion on the issues. As the researcher himself is not a native person of the area he had to cross over the social distance between Nagas and Non-Nagas and penetrate into the outer and inner life of persons and groups, and ascertain opinions, attitudes and values of the officers and non-official leaders at different levels.

Some of the interviews were non-directive (uncontrolled, or unguided or unstructured); for an example, meetings with the Ministers of the Nagaland State Cabinet. The Minister of Rural Development, Minister of Planning, Minister of Co-operation, Minister of Agriculture, Minister of Animal Husbandry, Minister of Education and Minister of Transport were met and the issues related to the study were discussed, but, it could not be recorded in a structured schedule like others, mainly for want of time. In such cases no or little directions were given to the respondents. The Ministers were free to express their views on issues posed by the researcher.

There were also directive interviews as a standardized technique and with a set of predetermined questions. The secretaries of Departments of Rural Development, Planning
and Directors of departments of Agriculture, Animal Husbandry, Industries, Health, Education, Social welfare, Khadi and Village Industries and Transport were interviewed with a predetermined tool.

There were also focused interviews with members of the Village Council and Village Development Boards, who were asked to give their personal reactions to their role played in the council or board meetings. Such interviews threw light on the behavioural pattern of leadership in villages. The focused interview schedules were semi-standardized and non-directive, but it enabled to secure precise details of personal reactions and the definite mental associations provoked by certain stimulus. The focused interviews made the researcher more alert and sensitive to inconsistencies or omission of details which were needed to clarify a given behavioural pattern. Furthermore, without these specific, selective, consistent and pertinent details of the total responses, it was not possible to analyse spheres of conduct of the leaders and their implications.

It was also found out that the interviewing technique could not be an independent research tool and it had to be supplemented by other techniques such as observational and
statistical, including scaling techniques.

There were; certain limitations in employing this technique. It was most often felt that the responses were highly subjective which brought in unwarranted interpretations, guesses and impressions into the data. Unless the interviewer is well trained the interview technique will not be highly successful. Another limitation is, it can not be ensured that all points or aspects discussed are promptly and fully recorded.

It was very essential that the researcher had to fix a convenient time to the interviewee and chose a place for interview where the interviewee would be at ease. Some knowledge of the daily routine of the interviewee 'also was essential for fixing proper time and place.

2.5.4 The use of case data - their sources and analysis

The vital organisations which are responsible for policy decisions, planning, implementation and co-ordination of rural development programmes are taken as cases for collection of data and supplement to the main issues of the study. The Village Councils, Village Development Board, Area Council, Regional Council, District Planning Board are
such vital organisations at Village, Area and District levels. The demand for manpower or utilisation of manpower highly depends upon the functions of these institutions. And therefore, these institutions were chosen for case data. The data related to these institutions were collected from the primary and the secondary sources.

As the first step, the legislations enacted which effected to constitute these bodies were referred. Based on this the subsequent rules framed by the departments with regard to the functioning of these bodies were also referred. Tho Government notifications with regard to the allotment of functions to the officers were pursued. And the connected officers were interviewed and their impressions regarding their own roles and functioning of these bodies were recorded. The relevant data connected to the study were incorporated in the interpretation.

2.5.5 Sampling Procedure and Conditions of Selection and testing for appropriativeness, representativeness and errors

"A statistical sample is a miniature picture or cross-section of the entire group or aggregate from which the sample is taken." "It is more economical and efficient to
base studies on samples and for most practical purposes the conclusions drawn from a sample can be just as valid as conclusions drawn from the analysis of the entire universe of cases".

Adequate care was taken to see the sample was a representative of the universe and it was unbiased and reliable. A representative sample is one that contains enough cases to ensure reliable results. But the question that immediately comes to mind is how many cases, or what proportion of a particular universe should be selected in order to obtain an adequate sample? "The answer always depends on what degree of reliability is required for the purpose of the research and on the amount of dispersion in the distribution of the characteristics studied if it is quantitative; or on the proportion of incidence if it is nonquantitative. If the universe is very homogeneous with respect to a certain quantitative characteristic a quite small sample may yield more reliable results in the estimation of the parameters describing this distribution than a much larger sample of another universe which is very heterogeneous with respect to

First of all, the study itself was formulated on 'area sampling' technique combined with other methods such as stratified random, simple and proportionate random techniques in selection of respondents.

The Kohima District in Nacjaland was chosen as the area for study owing to following reasons:

A. Kohima District is spread over around the State Headquarters and communication to study area is comparatively easier than other districts in Naga-land, and these factors could very well facilitate data collection and consultation with the state authorities on issues related to the study.

B. Another factor is the nearness of the study area to the location of the researcher's office where he had already established contact with the people and this could facilitate collection of more accurate information; and the cost of travel for

data collection could be minimised as it was purely a research study of an individual and not that of an institution.

The personnel involved in rural development work and the non-officials associated with the planning, co-ordination, implementation and evaluation of rural development work were classified into different strata and in each stratum a purposive random, or proportionate random or a simple random of sample was drawn for study.

The broad classification of strata was personnel employed in different fields such as, agriculture, animal husbandry, industries, health, education, social welfare, transport and communication. In each stratum the personnel were graded according to their official positions and field operations. Under each grade of personnel a minimum of twenty five percent of the universe of that stratum under each category were selected as samples of different strata. In most of the strata the entire universe of the particular stratum was enlisted for study and responses received.

The random sampling does not mean haphazard, careless, or unplanned, but according to the accepted standards of statistical sampling, every effort was made to control the
choice of items, so that every item in the universe should have the same probability of being included in the sample. A less cumbersome and valid technique of securing a purposive random sample was employed. According to this procedure the items in the universe were numbered systematically, and each item selected for the sample was made in accordance with the list available with the concerned department.
Some of the respondents selected from the list of personnel available in the development department and Voluntary Service Organisations.

<table>
<thead>
<tr>
<th>St. No.</th>
<th>Names of Departments</th>
<th>Mailed Questionnaire responses received</th>
<th>No. of persons despatched to</th>
<th>Mailed Questionnaire responses held with interview in number</th>
<th>Number of responses expected</th>
<th>Number of responses obtained</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>Rural Development Directorate and State Rural Development Agency</td>
<td>-</td>
<td>-</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>District Planning Committee</td>
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<td>-</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>Area Council/Block Development Office</td>
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<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>Extension Officers (Agri.)</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>5</td>
<td>Engineers under D.D.D.</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
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</tr>
<tr>
<td>6</td>
<td>Village Level Workers</td>
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<td>-</td>
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<tr>
<td>7</td>
<td>Secretaries of V.D.D (Village Development Boards)</td>
<td>220</td>
<td>52</td>
<td>15</td>
<td>235</td>
<td>67</td>
<td>26.5%</td>
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<tr>
<td>8</td>
<td>Rural Extension Training Centre</td>
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<td>65%</td>
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<tr>
<td>9</td>
<td>Live-Stock Assistants</td>
<td>-</td>
<td>-</td>
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<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>10</td>
<td>Maternity Assistants</td>
<td>12</td>
<td>4</td>
<td>4</td>
<td>16</td>
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<td>50%</td>
</tr>
<tr>
<td>11</td>
<td>Health Visitors</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>57.1%</td>
</tr>
<tr>
<td>12</td>
<td>Agricultural Directorate</td>
<td>23</td>
<td>17</td>
<td>9</td>
<td>32</td>
<td>26</td>
<td>81.2%</td>
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C/O  274  77  109  383  166
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<tr>
<th>Sl. No.</th>
<th>Names of Departments</th>
<th>Mailed Questionnaire Despatched to Persons in Nos.</th>
<th>No. of responses received</th>
<th>Personal interview held with (in number)</th>
<th>Total no. of responses expected (3+5)</th>
<th>Total no. of responses obtained (4+5)</th>
<th>Percentage of responses obtained</th>
</tr>
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<td>B/F</td>
<td>274</td>
<td>77</td>
<td>109</td>
<td>383</td>
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</tr>
<tr>
<td>13</td>
<td>Soil Conservation Department</td>
<td>15</td>
<td>8</td>
<td>8</td>
<td>23</td>
<td>16</td>
<td>69.6%</td>
</tr>
<tr>
<td>14</td>
<td>Animal Husbandry Department</td>
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<td>5</td>
<td>14</td>
<td>11</td>
<td>78.6%</td>
</tr>
<tr>
<td>15</td>
<td>Forestry Department</td>
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<td>11</td>
<td>7</td>
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<td>18</td>
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</tr>
<tr>
<td>16</td>
<td>Industries Department</td>
<td>12</td>
<td>5</td>
<td>10</td>
<td>22</td>
<td>15</td>
<td>68.1%</td>
</tr>
<tr>
<td>17</td>
<td>Co-operation Department</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>15</td>
<td>12</td>
<td>80%</td>
</tr>
<tr>
<td>18</td>
<td>Health Services</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>22</td>
<td>20</td>
<td>90.9%</td>
</tr>
<tr>
<td>19</td>
<td>Economic statistics</td>
<td>-</td>
<td>-</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>100%</td>
</tr>
<tr>
<td>20</td>
<td>Education Department</td>
<td>17</td>
<td>12</td>
<td>12</td>
<td>29</td>
<td>24</td>
<td>82.8%</td>
</tr>
<tr>
<td>21</td>
<td>Fishery Department</td>
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<td>2</td>
<td>6</td>
<td>15</td>
<td>8</td>
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</tr>
<tr>
<td>22</td>
<td>Higher &amp; Technical Education Department</td>
<td>9</td>
<td>-</td>
<td>6</td>
<td>15</td>
<td>8</td>
<td>53.3%</td>
</tr>
<tr>
<td>23</td>
<td>Social Welfare Department</td>
<td>-</td>
<td>-</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>100%</td>
</tr>
</tbody>
</table>

<p>| C/D    | 381                                  | 159                                              | 213                        | 594                                     | 352                                  |</p>
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Names of Departments</th>
<th>Mailed Questionnaire despatched to persons in Nos.</th>
<th>No. of responses received in number through questionnaire</th>
<th>Personal interview held with (in number)</th>
<th>Total no. responses expected (3+5)</th>
<th>Total no. responses obtained (4+5)</th>
<th>Percentage of responses obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.</td>
<td>Relief &amp; Rehabilitation Department</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>26.</td>
<td>State Social Welfare Board</td>
<td>-</td>
<td>-</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>100%</td>
</tr>
<tr>
<td>27.</td>
<td>Information &amp; Publicity</td>
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<td>3</td>
<td>4</td>
<td>15</td>
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<tr>
<td>28.</td>
<td>Water Supply</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>29.</td>
<td>State Khadi and Village Industries Board</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>30.</td>
<td>Regional Office of the Khadi and Village Industries Commission</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>31.</td>
<td>Social Welfare Extension Project</td>
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<td>2</td>
<td>11</td>
<td>22</td>
<td>13</td>
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</tr>
<tr>
<td>32.</td>
<td>Department of Evaluation</td>
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<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>33.</td>
<td>Department of Electricity</td>
<td>15</td>
<td>7</td>
<td>6</td>
<td>21</td>
<td>13</td>
<td>61.9%</td>
</tr>
<tr>
<td>34.</td>
<td>Rural Roads – RWD</td>
<td>15</td>
<td>8</td>
<td>7</td>
<td>22</td>
<td>15</td>
<td>68.2%</td>
</tr>
<tr>
<td>35.</td>
<td>Voluntary Institutions/Service organisation</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>381</strong></td>
<td><strong>139</strong></td>
<td><strong>213</strong></td>
<td><strong>594</strong></td>
<td><strong>451</strong></td>
<td><strong>61.87%</strong></td>
</tr>
</tbody>
</table>
2.5.6 Statistical Procedures

Statistical analysis is not a mere mechanical process of applying formulae and operating a calculating machine. Statistical work requires good judgement, a critical attitude, and careful thought.

The statistical analysis is always based on reliable and valid data. Data are more than facts, figures, information, events, experiences and more than memories of a teller. Data are the relevant materials, past and present, serving as bases for study and analysis. They are the living stuff, with all the relevant emotional and mental signs attached to one's expressions, actions, attitudes and values within the respondent's social world. This was kept in mind while the researcher collected the data from the highly emotional Naga informants. For the purpose of obtaining reliable, verifiable, measurable data, the researcher, taking into account the socio-political and ethnic factors; of the area, had taken extreme care personally to interview the public leaders and officers without embarrassment to the informants or agencies from whom or from which data were secured or by which they were verified.
2.5.7 Processing and analysis of data

As Nagaland is a new place with a new culture to the researcher it was not easy to understand the situations on which the data were collected. Therefore, while going through the Government reports he always assumed that behind the data collected from the government offices there were something more important, and revealing than the facts and figures themselves. The facts and figures, by themselves do not often make scientific sense. They are not simple. They may pose many crucial problems. They involve subjective and objective elements in varying degrees and combinations. For example, two officers of the same department with same official status, same race and cultural background, same educational qualification, same number of years of experience may not have the same level of understanding of problems and same attitude towards the problems. On a number of points they may differ from each other. The data analysis demands a thorough knowledge of the situations. Without penetrating into the situations, analysis is likely to be aimless, if not altogether worthless. The researcher did allow his imagination to roam over to find out the similarities between the data and to understand the comparative significance between the events which are influenced by
human behaviour. The researcher asked himself many questions about his study and the data collected. The questions are given under appendices. It was this procedure which stirred his imagination and induced new ways of looking at his problem and his data. And it was this procedure which brought full answer to the problem of research.

Before the analysis was made, sufficient care was taken to see whether the data were sufficiently complete which might explain the research questions under consideration, whether the data were objectively recorded and they were susceptible to quantitative treatment? whether the data were representative of the universe; whether they were internally consistent; whether the data could be combined into one body of the thesis; whether the data could bring out the cause and effect relationship between the variables; whether new insights can be gained out of the data collected; whether the data provide for formulation of new hypotheses.

Thus, the data were properly codified and brought under a transcription sheet for classification. The classified data were fed into tables for quantitative analysis. As the data were more related to the organisational pattern of man-power, such information were brought under organisational flow charts to show their inter and intra linkages be-
tween different strata of manpower resource. And then, their relationship between the variables were described in nine chapters.