CHAPTER - III

METHOD AND PROCEDURE

Research method is of utmost importance in a research process, because research is not an existing bag of techniques. It is not a fishing expedition or an encyclopedic gathering of assorted facts. Research refers to a systematic attempt to gain a better understanding of the educational process, generally with a view to improve its efficiency. It is a purposeful investigation. Research needs a particular method to be adopted by the researcher, keeping in view the type and nature of the problem. An appropriate research method describes the various steps of the plan of action to be adopted in solving a research problem. It facilitates the researcher in the choice of data gathering tools, the collection, analysis and interpretation of data, and the process of drawing inferences and generalizations. “If the scholar cannot clearly describe his method, the chances are that it is too vague and general to yield him satisfactory results” (Hillway, 1956).

The present study aimed at studying the National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) in Himachal Pradesh in terms of its present status of implementation and achievement of objectives. In the execution of the present study following methodology was adopted keeping in view the nature of the problem, objectives and kind of data necessary for its solution.

3.1 RESEARCH METHOD

The study was conducted through descriptive survey method of research which has undoubtedly been the most popular and widely used research method in education. Descriptive survey method is designed to obtain pertinent and precise information concerning the existing status of phenomena and whenever possible, to draw valid generalizations for the facts discovered without making any interference or control over the situation. Such type of studies are restricted not only to fact finding but may often result in the formulation of important principles of knowledge
and solution of significant problems concerning local, state, national and international issues. It helps to explain the educational process in terms of conditions or relationships that exist; points of view of students, teachers, parents and experts; phenomena that are going on, effects that are evident, or trends that are developing. Presently, descriptive survey is the only means through which status of implementation, perceptions of teachers as well as their attitude, students’ reactions, parents’ perceptions, researcher’s opinions towards Mid Day Meal Scheme as well as suggestions for improvement of the programme and other data related to enrolment, attendance, retention and number of under-weight and under-nutrient students studying in classes I-V in relation to their gender and type of social category can be obtained. In order to study the development of Mid Day Meal Scheme in Himachal Pradesh documentary analysis was carried out.

Therefore, in the execution of the present study descriptive survey method of research was employed. Descriptive surveys investigate phenomena in their natural setting. Such surveys, however, provide information useful to the solution of problems, making future improvements and at times provide data to form the basis of research of a more fundamental nature.

3.2 UNIVERSE OF THE STUDY AND SAMPLING

Most of the educational phenomena consist of a large number of units. It would be impracticable if not impossible, to test, to interview or observe each unit of the population under controlled conditions in order to arrive at principles having universal validity. Some populations are so large that their study would be expensive in terms of time, money, effort and manpower. The universe of the study was the Government and Government aided primary schools as well as EGS/AIE Centers of Himachal Pradesh, offering National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme), along with all teachers, students and their parents.
Sampling is the process by which a relatively small number of individuals or measures of individuals, objects or events are selected and analyzed in order to find out something about the entire population or the target population from which it was selected. A representative proportion of the population is called a sample. Sampling is the basis of any scientific investigation. Sampling has been increasingly used in education to ascertain information necessary in answering certain questions about a specific population.

In the present study multistage sampling procedure followed in combination with the technique of stratified proportionate random sampling was used because the work in the hand was a large scale inquiry covering large geographical area in the State of Himachal Pradesh. The multistage sampling procedure has the advantage that the frame of second stage units is necessary only for the selected first stage units. Likewise, the frame of third stage units is necessary only for the selected second stage units. The procedure is quite flexible and it permits the use of different selection procedures in different stages. It may also be mentioned that multistage sampling is the only sampling procedure available in a number of practical situations, such as collecting information about implementation of various programmes in schools, school students, parents, teachers etc. in a large geographical region. In the present study sampling was done in two stages.

**STAGE-I**

In the first phase, out of twelve districts of Himachal Pradesh three districts namely Mandi, Kangra and Bilaspur were selected from the non-tribal region and district Lahaul-Spiti was selected from the tribal region randomly by the draw of lots. For the selection of the schools, lists of government primary schools (Educational Blocks wise) were obtained from the Deputy Director Office of the concerned district.
STAGE-II

In the second phase, from the selected four districts, 10 educational blocks were selected randomly by the draw of lots and a proportionate sample of 200 government primary schools was selected by making use of random numbers table. The description of the sample is given in table 3.1.

Table 3.1
Description of the Sample

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>District</th>
<th>Educational Block</th>
<th>No. of Schools</th>
<th>No. of Teachers</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mandi</td>
<td>Sadar</td>
<td>20</td>
<td>61</td>
<td>133</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Balh</td>
<td>31</td>
<td>90</td>
<td>203</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sunder Nagar-1</td>
<td>30</td>
<td>78</td>
<td>229</td>
</tr>
<tr>
<td>2.</td>
<td>Kangra</td>
<td>Dharamshala</td>
<td>13</td>
<td>32</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chadhir</td>
<td>25</td>
<td>45</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panchrukhi</td>
<td>26</td>
<td>51</td>
<td>189</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Palampur</td>
<td>18</td>
<td>41</td>
<td>119</td>
</tr>
<tr>
<td>3.</td>
<td>Bilaspur</td>
<td>Ghumarwin</td>
<td>20</td>
<td>34</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sadar</td>
<td>07</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>4.</td>
<td>Lahaul-Spiti</td>
<td>Spiti</td>
<td>10</td>
<td>14</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>Four Districts</td>
<td>Ten Educational Blocks</td>
<td>200 Schools</td>
<td>469 Teachers</td>
<td>1380 Students</td>
</tr>
</tbody>
</table>

The detailed list of selected government primary schools along with gender-wise number of teachers and students is given in Appendix-1.
Thus sampling for the present study was made in the following manner.

1. **Government Primary Schools**

For studying the implementation of National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) a total sample of 200 government primary schools was selected in all by using multistage random sampling technique.

2. **Primary School Teachers**

All primary school teachers who were willing to respond were selected for the purpose of studying their perceptions and attitude towards Mid Day Meal Scheme.

3. **Primary School Students**

In order to study reactions of students towards Mid Day Meal Scheme a sample of 1380 (Male 686 and Female 694) primary schools students studying in the sampled schools was drawn by using purposive sampling technique.

4. **Parents**

For selection of parents in order to explore their perceptions regarding Mid Day Meal Scheme, the method of quota sampling was employed and a sample of 500 (Male 150 and Female 350) parents was selected.

3.3 **RESEARCH TOOLS**

The selection of suitable tools is of vital importance for successful research. The success of any research endeavor is largely dependent upon the tools which are used for the data collection. In the present study the researcher needed two types of data i.e. one concerning the implementation of the National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) and secondly the impact of the Scheme in terms of achievement of its objectives, i.e. to boost UEE (by increasing enrolment, retention and attendance) and impacting on nutritional status of children studying in classes I-V in these government
primary schools. For this purpose two types of tools were developed. First the Programme Parameter Tools and second the Impact Parameter Tools.

3.3.1 Programme Parameter Tools

1. Attitude scale for primary school teachers measuring attitude towards Mid Day Meal Scheme.
2. Questionnaire to study the teachers’ perceptions towards Mid Day Meal Scheme.
3. Questionnaire to study the students’ reactions towards Mid Day Meal Scheme.
4. Questionnaire to study the parents’ perceptions towards Mid Day Meal Scheme.
5. Observation schedule regarding implementation of Mid Day Meal Scheme in government primary schools of Himachal Pradesh.

3.3.2 Impact Parameter Tools

1. **Schedule-I**: for obtaining gender-wise data from classes I-V pertaining to enrolment of students from session 1999-2000 to 2009-10.
2. **Schedule-II**: for obtaining gender-wise data from classes I-V pertaining to number of drop-outs from session 1999-2000 to 2009-10.
3. **Schedule-III**: for obtaining data pertaining to attendance of class III students for the first quarter of session 2009-10.
4. **Schedule-IV**: for obtaining data pertaining to attendance of class V students for the first quarter of session 2009-10.
5. **Schedule-V**: for obtaining class-wise list of under-weight and under-nutrient students in relation to their gender and the social category to which they belong.

All the research tools were developed by the researcher himself. The brief description of the tools is given as under.
3.3.1 Programme Parameter Tools

Following programme parameter tools were developed in the present study.

3.3.1.1 Attitude Scale for Primary School Teachers measuring Attitude towards Mid Day Meal Scheme

Keeping in view the objectives of the present study, the investigator had to develop and standardize scale for primary school teachers’ attitude towards Mid Day Meal Scheme, as there was no standardized scale available for this purpose which could be administered on primary school teachers of this hilly region. The main purpose of this attitude scale was to explore the attitude of primary school teachers towards Mid Day Meal Scheme and to measure their feelings of like or dislike about the Scheme. This scale was developed in Hindi language. The items in the scale were formulated by using Likert Type Scale (three point agree-disagree scale).

In developing a Likert type attitude scale, following steps were followed by the investigator:

1. Writing of statements which expressed both positive and negative opinion towards Mid Day Meal Scheme.
2. Evaluation of statements by language experts and subject experts in terms of their relevance and linguistic, technical and logical accuracy.
3. Try-out the preliminary draft.
4. Estimating the reliability of the scale.
5. Validity of the scale.

A detailed description of these steps is given here under.

1. Writing of Statements for Teachers’ Attitude Scale

In preparing an initial list of statements for teachers’ attitude scale towards National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme), the following criteria as listed by Edwards (1957) on the basis of suggestions given by Thurstone and Chave (1929),
Wang (1932), Bird (1940), Edwards and Kilpatrick (1948) was taken into consideration:

- The factual statements or those statements that may be interpreted as factual were avoided.
- The language of the statements was kept simple, clear and unambiguous.
- The statements that may be interpreted in more than one way were avoided.
- Each statement contained only one complete thought.
- The statements which referred to past instead of present of the subject were avoided.
- The statements were written in simple sentences rather than in complex or compound sentences.
- The use of double negatives was avoided in framing the statements.
- The statements that were irrelevant to the psychological object under construction i.e. attitude towards Mid Day Meal Scheme were avoided.
- Statements that were likely to be endorsed by almost everyone or by almost no one were avoided.
- Statements containing universals such as all, always, none and never which may introduce ambiguity were avoided.

In the light of these criteria, a total of 76 statements were prepared for the first draft of attitude scale. The items were drafted to elicit teachers’ attitude towards Mid Day Meal Scheme on the issues of its importance for students, achievement of objectives, present status of implementation, role of various agencies involved and community, relationship with curriculum and other related aspects.

Out of these 76 statements, 40 statements were positive in nature whereas the remaining items were of negative nature. Every item was rated on a three point scale as suggested by Likert i.e. Agree (A), Neutral (N) and Disagree (D). Each of these three points was given numerical values ranging from 1 to 3. All positive statements were to be scored in
such a way that teachers preferring ‘Agree’ opinion will be awarded a score of 3 and teachers preferring ‘Disagree’ opinion will be awarded a score of 1 and middle point of the scale had proportionate value i.e. 2. However, in case of negative statements, the scoring procedure was reversed completely in such a manner that the ‘Agree’ opinion will be awarded a score of 1 and ‘Disagree’ opinion will be awarded a score of 3. The total score of the teacher on this scale was computed by adding the score of individual items in the scale. The scoring pattern in case of positively and negatively worded statements is shown in table 3.2.

### Table 3.2

Response Pattern of Teachers’ Attitude Scale

<table>
<thead>
<tr>
<th>Response Pattern</th>
<th>Positive Statements</th>
<th>Negative Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Undecided</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

The attitude scores of teachers were expected to range between 76 to 228.

2. **Revising and Editing of Statements**

After writing the statements of attitude scale they were edited and revised in the light of the criteria mentioned earlier. For this purpose, the first draft of attitude scale was typed, printed and xeroxed by taking necessary care regarding legibility of items and typographical errors. Then the printed copies of first draft of attitude scale were given to the subject experts, primary school teachers, headmasters and research scholars of different institutions. The investigator personally discussed each statement with the experts and their suggestions were sought in order to remove any sort of technical and logical ambiguity of the statements. In addition to this, language experts were also consulted at this juncture to remove any language ambiguity in the statements. After a careful and critical analysis of the statements, some of the statements were rejected from first draft of attitude scale and some statements were modified and revised accordingly on the basis of the suggestions given by
the experts. On the completion of this exercise, 11 statements were rejected from the first draft and remaining 65 items were retained for the preliminary draft of teachers’ attitude scale. These statements were then arranged in a random order. In this preliminary draft, item numbers 1, 2, 5, 7, 11, 13, 14, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 36, 37, 44, 45, 48, 52, 55, 56, 61 and 62 were positively worded and the remaining items were negatively worded.

(A copy of preliminary draft of teachers’ attitude scale is given in Appendix-II.)

3. Try-Out of the Preliminary Draft

The preliminary draft of attitude scale was administered on a sample of 150 government primary school teachers drawn randomly from two educational blocks of district Mandi and Hamirpur namely Dharampur and Bhoranj respectively. First of all, the investigator made the teachers clear about the purpose of the study and they were further given information regarding the procedure of citing their responses. As there was no time limit for completing the scale, teachers took 20 to 25 minutes on an average to complete the scale. Then the booklets were collected and scoring was made for every item on three point rating scale by following the scoring procedure as mentioned earlier.

After scoring all the protocols, the range of scores turned out to be 93 to 179. The investigator further proceeded with the technique of item analysis for the selection of the items for the final draft of attitude scale. On the basis of 27% cut point, high and low scoring groups (N=41) were formed. The middle 46% were weeded out and not considered for future analysis. The item wise means and standard deviations were computed, separately for high and low scoring groups and significance of mean differences was computed item wise by using t-test. (The table showing item comparison on high and low scoring groups on attitude towards National Programme of Nutritional Support to Primary Education (Mid Day Meal Scheme) is given in Appendix-III.)
Thus, t-value for all 65 items were computed and the items having t-value equal to or greater than 1.990 at 0.05 level of significance were selected for final draft of teachers’ attitude scale and rest of the items having t-value less than 1.990 were rejected. The t-value testing significance of mean difference between high and low scoring groups turned out to be significant in case of item number 1, 2, 4, 5, 6, 7, 8, 9, 10, 13, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 43, 46, 47, 48, 49, 50, 51, 52, 53, 55, 56, 57, 58, 60, 61, 62, 64 and 65. The t-value in case of item number 3, 11, 12, 14, 15, 16, 21, 41, 44, 45, 54, 59 and 63 did not turned out to be significant at 0.05 level of significance. On this basis, thirteen items were rejected and remaining 52 items were selected for final draft of teachers’ attitude scale.

Out of these 52 items, 25 items were positively worded having serial number 1, 2, 4, 6, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 24, 25, 29, 30, 38, 42, 44, 45, 49 and 50 in the final draft and remaining items were negatively worded.

(A copy of final draft of teachers’ attitude scale is given in Appendix-IV.)

4. Reliability of the Attitude Scale

Reliability refers to the consistency of scores obtained by respondents/subjects, when re-examined with the same test on different occasions (stability) or within the same test across two equal sets (internal consistency). Since all types of reliability are concerned with the degree of consistency or agreement between two independently derived set of scores, these can be expressed in terms of correlation coefficient. In order to determine the reliability of the attitude scale, an independent sample of 75 government primary school teachers from two educational blocks namely Hamirpur and Sujanpur of Hamirpur district was drawn on random basis. The scale was administered on the selected teachers twice with a gap of three months. The reliability coefficients for final draft of teachers’ attitude scale are shown in table 3.3 and 3.4.
Table 3.3

Split-half Reliability of Final Draft of Attitude Scale (N=75)

<table>
<thead>
<tr>
<th>Item pool</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>rhh</th>
<th>rtt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odd (26)</td>
<td>59.70</td>
<td>12.99</td>
<td>0.9057 NS</td>
<td>0.8302</td>
<td>0.9072 **</td>
</tr>
<tr>
<td>Even (26)</td>
<td>61.43</td>
<td>10.32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at 0.01 level  
NS Not Significant at 0.05 level

As evident from table 3.3 that the primary school teachers did not differ significantly in their mean attitude score obtained on two set of the scale (i.e. odd and even having 26 items each), the t-value being 0.9057, which is not significant at 0.05 level of significance with df 73. The relationship between two halves of the scale (rhh) came out to be 0.8302. When corrected by applying Spearman-Brown prophecy formula, the correlation turned out to be 0.9072, which is highly significant at 0.01 level of significance with df 73. This indicates that the attitude scale is internally consistent.

Further, the results of test-retest reliability were worked out as given in table 3.4.

Table 3.4

Test-Retest Reliability of Attitude Scale (N=75)

<table>
<thead>
<tr>
<th>Administration</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>121.82</td>
<td>21.99</td>
<td>0.616 NS</td>
<td>0.80**</td>
</tr>
<tr>
<td>IIand (Gap of 3 months)</td>
<td>119.68</td>
<td>20.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at 0.01 level  
NS Not Significant at 0.05 level

The table 3.4 shows that the mean attitude score of primary school teachers did not differ significantly over two administrations of the scale
after a gap of 3 months (t=0.616 and not significant at 0.05 level with df 73). Further the coefficient of correlation between two set of scores on attitude scale came out to be 0.80, which is highly significant. This is indicative of the fact that the attitude scale has consistency over time to measure attitude of primary school teachers towards Mid Day Meal Scheme.

5. Validity of Attitude Scale

The validity of a test concerns what the test measures and how well does it so. In the present case, content validity was established as explained here under.

Content validation

The content validity involves the systematic examination of test content to determine whether it covers a representative sample of the behaviour domain to be measured. In the present case, content validation was done while preparing the preliminary draft of attitude scale and with the help of expert opinion of teachers, scholars and language specialists with regard to the relevance of each item in the scale.

Further, for selecting items for final draft of attitude scale, item analysis was carried out on two extreme groups of primary school teachers. After carrying out item analysis, only those items were retained in the final draft, which were capable of differentiating between high and low scoring groups of teachers. This differentiation was considered as a strong evidence for the validity of the scale for attitude of primary school teachers towards Mid Day Meal Scheme.

3.3.1.2 Questionnaire to Study the Teachers’ Perceptions towards Mid Day Meal Scheme

Questionnaire is a systematic compilation of questions that are administered to a sample of population from which information is desired. This questionnaire was developed by the investigator for the purpose of studying teachers’ perceptions towards Mid Day Meal Scheme. This questionnaire was consisted of one introductory paragraph and
three parts in which Part-I was used to seek general information related to teachers like Name of School, Gender, Area (Tribal/Non tribal), District, Educational Block and Date of filling the questionnaire. In Part-II of the questionnaire there were 30 closed type questions concerning all the important aspects of Mid Day Meal Scheme. Part-III of the questionnaire included open ended questions in which teachers were allowed to write down freely the problems in the implementation of Mid Day Meal Scheme and also the suggestions for its improvement.

The content validity of the questionnaire was established by seeking technical assistance from subject experts, primary school teachers, research scholars, supervisor and language experts.

(A copy of questionnaire to study the teachers’ perceptions towards Mid Day Meal Scheme is given in Appendix-V.)

3.3.1.3 Questionnaire to Study the Students’ Reactions towards Mid Day Meal Scheme

This questionnaire was designed to know about students’ reactions towards Mid Day Meal Scheme. The reaction here implies how the students respond to the Scheme in terms of various aspects. The questionnaire has 21 questions arranged in 21 rows with three options for each question- ‘Yes’, ‘No’ and ‘Don’t Know’. Along with this the upper part of the questionnaire was used to gather general information about the responding students. Out of 21 items, 6 items were negatively worded and rests of the items were positively worded. The content validity of the questionnaire was determined by seeking expert opinion from teachers and language experts. In the light of their suggestions, 6 items were rejected and some of the items in the first draft were reconstructed according to the comprehension level of the students. In order to ensure adequacy of the tool with respect to the students individual trial out was also carried out. However, it was found that no further modification was needed. The final draft of the questionnaire was consisted of 15 items in which six items at serial number 4, 7, 8, 9, 10 and 15 were negatively
worded and rest of the items at serial number 1, 2, 3, 5, 6, 11, 12, 13 and 14 were positively worded.

(Final copy of questionnaire to study the students’ reactions towards Mid Day Meal Scheme is given in Appendix-VI.)

**3.3.1.4 Questionnaire to Study the Parents’ Perceptions towards Mid Day Meal Scheme**

This questionnaire was developed by the investigator to seek parents’ perceptions towards Mid Day Meal Scheme. This questionnaire was consisted of two parts in which first part was used to gather general information regarding responding parents and second part has 18 questions arranged in 18 rows with three options for each question—‘Yes’, ‘No’ and ‘Don’t Know’. Out of 18 items, 7 items at serial number 7, 8, 9, 12, 13, 14 and 18 were negatively worded and remaining items were positively worded. Content validation was done while preparing the initial draft of the questionnaire and with the help of expert opinion of teachers, language specialists and scholars. On the basis of their comments, some of the items in the initial draft were reconstructed to convey an objective meaning on the various issues of Mid Day Meal Scheme. The experts were of the opinion that the items in the questionnaire are valid enough to study the parents’ perceptions towards Mid Day Meal Scheme.

(A copy of questionnaire to study the parents’ perceptions towards Mid Day Meal Scheme is given in Appendix-VII.)

**3.3.1.5 Observation Schedule**

The observation schedule regarding implementation of Mid Day Meal Scheme used in the present study is a modified version of ‘Feed Back Format’ used in DIETs, prepared by Directorate of Elementary Education, Government of Himachal Pradesh. Every DIET in the State of Himachal Pradesh provides evaluation report of the Scheme to the Directorate, Elementary Education, Government of Himachal Pradesh at the end of every three months through this ‘Feed Back Format’. This observation schedule seeks information with regard to five dimensions:
1. Infrastructural facilities available in the school for Mid Day Meal Scheme.
2. Cleanliness of kitchen and other cooking devices.
3. Quality of mid day meal being provided.
4. Precautions while preparing and distributing the mid day meal.
5. Researcher’s perceptions.

Items in the observation schedule were alternative type, followed by space for any other comment. The last part of the schedule was open ended and meant for any other important observations in the school concerning Mid Day Meal Scheme.

(A final copy of observation schedule is given in Appendix-VIII.)

### 3.3.2 Impact Parameter Tools

Following impact parameter tools were developed in the present study.

#### 3.3.2.1 Schedule I and II

In the present study, schedule I and II were used to collect gender-wise data pertaining to enrolment of students and number of drop-outs respectively for classes I-V in selected government primary schools of Himachal Pradesh from session 1999-2000 to 2009-10.

(Copies of Schedule I and II are given in Appendix-IX and X respectively.)

#### 3.3.2.2 Schedule III and IV

Schedule III and IV were used to collect data related to attendance of class III and class V students respectively for the first quarter of session 2009-2010 (i.e. April, May and June) in each government primary school.

(Copies of Schedule III and IV are given in Appendix-XI and XII respectively.)

#### 3.3.2.3 Schedule V

In order to know the number of under-weight and under-nutrient students Schedule V was used to gather information related to such children.

(A copy of Schedule V is provided in Appendix-XIII.)
3.4 DATA COLLECTION: ADMINISTRATION OF TOOLS

After finalization of research tools and selection of sample, the next step is to collect data. Before the collection of data from government primary schools of Himachal Pradesh, permission was sought from Director, Directorate of Elementary Education, Government of Himachal Pradesh vide letter number EDN-H9(4)-60/2008-Misc-Vol-II regarding using the official records and making visits to the schools and collect information and to observe the present status of implementation of Mid Day Meal Scheme. (A copy of permission letter is given in Appendix-XIV.)

The investigator visited the selected government primary schools on working days with prior intimation to the school regarding the purpose of visit i.e. data collection. All primary schools teachers in the sampled schools were requested to respond to all questions in the questionnaire in a free and frank manner. Then they were requested to respond to attitude scale to measure attitude towards Mid Day Meal Scheme. The researcher also analyzed all the important aspects of the Mid Day Meal Scheme in accordance with the observation schedule. The selected primary school students were given the questionnaire and instructions were read and explained by the investigator. Items were also translated and explained to students whenever they found difficulty in understanding.

The data related to enrolment and number of drop-outs in each session was collected from the official register. The attendance of students studying in class III and V for the first quarter of the session 2009-2010 was provided by the concerned class in-charge teacher. The information of under-weight and under-nutrient children was obtained from the health register of the students in the schools. In maximum schools such register was not available, in that case the selection of children was based on the judgment of the researcher and the concerned school teachers jointly. In order to know about the standard and quality of mid day meal which is provided to the students in these schools, the
researcher himself tasted the meal in some schools in order to have firsthand experience.

In the another phase the parents of students, identified for data collection were taken into confidence by explaining the purpose of research study and its use in improving the Mid Day Meal Scheme. They were requested to respond to all questions in the questionnaire. In some cases, where the parents were unable to fill the questionnaire, in that case questions were asked from the parents by the researcher himself and the responses were filled in by him personally in order to get more clear and accurate information.

**3.5 SCORING OF TOOLS**

The scoring procedure of different tools used in study is as under.

1. **Attitude Scale measuring teachers’ attitude towards Mid Day Meal Scheme**
   
   As explained earlier, the scale has 52 items (27 negative and 25 positive) and were scored on a 3-point continuum to provide a summated score ranging from 52-156.

2. **Questionnaire to study the teachers’ perceptions towards Mid Day Meal Scheme**
   
   The frequency count was used to classify teacher response to each structured question. In case of open ended questions, the responses were noted down.

3. **Questionnaire to the study students’ reactions towards Mid Day Meal Scheme**
   
   The responses of students on each structured item were counted.

4. **Observation Schedule regarding implementation of Mid Day Meal Scheme**
   
   This observation schedule has five dimensions and different comments were noted down in each dimension along with frequency count.
5. Questionnaire to study parents’ perceptions towards Mid Day Meal Scheme

The obtained data was tabulated and organized in the form of frequencies separately for each item.

3.6 STATISTICAL TREATMENT OF DATA

The information collected through teachers’ questionnaire, students’ questionnaire, parents’ questionnaire and observation schedule was put to percentage analysis to give meaning to data. The percentage means that the results are calculated and discussed from per 100 in order to understand the results in a better manner. In case of data pertaining to attendance, drop-outs and nutritional status percentage analysis was the sole criteria for analysis and interpretation.

In order to study the significance of differences (gender-wise, teaching experience-wise and social category-wise) in the attitude scores of primary school teachers with regard to Mid Day Meal Scheme, the means and SDs were computed and t-test was applied i.e. to verify hypotheses formulated in the study.