A well designed methodology constitute an important part of research as it provides the researcher a scientific and feasible plan to proceed in a definite direction towards solving the problem under analysis and to satisfy the requirements of the investigation. The plan in the present chapter is confined to the selection and development of the tools and techniques used in this investigation and thus presents the design of the study, population, sample, development and description of tools, statistical techniques used for data analysis and the organization of thesis.

The present study attempts to evaluate the functioning of the Village Education Development Committees (VEDCs) in the two of the least literacy districts namely Mansa and Muktsar of the state of Punjab. The process of formation, composition and functions of these committees have been studied primarily from the secondary sources largely consisting of the documents, reports, circulars and guidelines of the State as well as the Central Government.

In order to know the socio-economic profile and the awareness of the VEDC members, primary data has been collected with the help of pre-designed structured Interview Schedules. The availability of general facilities in the sampled schools was known with the help of a pre-designed School Information Questionnaire.

For exploring the change in enrollment, the change in the class-wise and gender-wise gross enrollment was calculated across three years period (2000-2003) before the formation of the VEDCs and for three years period (2003-2006) after the formation of the VEDCs. Likewise, the change in school drop-outs and school results was examined by calculating the difference between the absolute numbers of the students failed and dropped out in each year in each class over a period of three years (2000-2003) before the formation of the VEDCs and for three years period (2003-2006) after the formation of the VEDCs.

3.1 Research Design

The research design followed in the study is descriptive and evaluative. The focus of the study is to describe the functioning of the VEDCs by securing evidence
from the existing situations. The descriptive survey method has been adopted primarily due to the fact that it is one of the most commonly used method of investigation that attempts to describe and interpret what exists in the present conditions.

3.2 Population

All the members of Village Education Development Committees (VEDC) and the teachers of the rural primary schools of the state of Punjab form the population of the present study. The members of Village Education Development Committees include head teachers, members of the village panchayats, members of the respective parent–teacher associations, retired teachers, ex-servicemen, and philanthropists /NRIs. According to DISE (2008-2009) there are 12279 government rural primary schools out of the total 19326 government schools (primary, upper primary, secondary and senior secondary) in the state of Punjab. Since under Sarva Shiksha Abhiyan (SSA), it is mandatory for every government elementary school to have a village education development committee to ensure community participation for smooth functioning of the village school, the members of all the 12279 Village Education Development Committees (VEDCs) made for the rural government primary schools forms the population of this study.

3.3 Sample

In order to collect valid and reliable data about the functioning of the VEDCs, the researcher employed multi-stage purposive-cum-stratified random sampling. After selecting the two lowest literacy districts, villages, village schools, VEDCs, members of the VEDCs and the school teachers formed different units taken into consideration for drawing the sample for this study. As such, a village has been the principle unit while the VEDC and the village school formed the second unit of sampling. The members of VEDCs and the teachers formed the final unit of sampling for the present study.

3.3.1 Selection of Districts

For selection of districts, the criterion followed was the level of literacy. Since the study is proposed to be carried out in the educationally backward districts, the
researcher purposively selected two most educationally backward districts with the lowest the literacy rates (as per the Census 2001) from among all the districts of the state of Punjab. This way district Mansa and Muktsar were identified as the two districts for carrying out this study. As per the Census 2001, the literacy rate of Mansa is the lowest with 52.4% while that of Muktsar is the second lowest with 58.2% as against 69.7% for the state of Punjab.

3.3.2 Selection of Villages (thereby the schools and VEDCs)

For the drawing the sample of villages, the list of villages of both the districts (Mansa and Muktsar) were accessed from the Census 2001 data. In Mansa, there are 237 villages while in Muktsar there are 233 villages. As per the DISE data 2007-2008, there were 466 schools in District Mansa of which 291 were primary, 82 upper primary and the rest 93 schools were upper primary with secondary / senior secondary schools. Of these schools, 341 were managed by the Department of Education, Govt of Punjab while 124 were being managed by the Panchayats and one by local body. Across Muktsar District there were 521 schools consisting 321 primary schools, 74 upper primary schools and 126 upper primary with secondary / senior secondary schools. In this district 408 schools were managed by Department of Education, Govt of Punjab while 111 were being managed by the Panchayats and 02 were managed by local body.

For the sample, a total of 52 villages as per required indices, have been selected from both the districts (26 villages from District Mansa and 26 villages from District Muktsar). The selection of a village eventually led to the selection of a school and the respective Village Education Development Committee (VEDC). Ultimately 52 rural primary schools and 52 VEDCs were studied for the present investigation.

For drawing the sample a careful examination of village directories of Census 2001 of both the districts from the Primary Census Abstract 2001 was done. The villages of both the districts were sorted out in the descending (decreasing) order of literacy rates. The sorting of village directories of both the districts were thought essential so that the villages with higher literacy rates were arranged at the top of the Lists while the villages with lower literacy rates were arranged at the bottom of these Lists. For this purpose, soft copies of the village-wise lists from the Primary Census
Abstract 2001 in MS-Excel formats were used. As the MS-Excel formats of Primary Census Abstract 2001 present the data in absolute numbers, one column was added for depicting the literacy rates of each village for the purpose of sorting these lists. The Lists were then sorted out as per the figures in the added column. For calculating literacy rates, the standard formula (as shown below) was used.

Literacy of Village X = (No. of Literates in village X / Population aged 7+ of village X) * 100

The details of drawing the sample are as follows:

In the first place, a total of 13 villages were selected purposively from the high literacy villages from Mansa beginning from the top of the sorted village list and moving towards the bottom of the sorted village list of this district. Thereafter another 13 villages from Mansa were purposively selected from the low literacy villages beginning from the bottom of the sorted village list and moving towards the top of the sorted village list of Mansa. This way, from Mansa, 13 villages of high literacy rates were randomly drawn from the top of the village list and 13 villages of low literacy rates were picked up from the bottom of the village list for the sample. Adopting the same top-down approach for drawing high literacy villages and bottom-up approach for the low literacy villages, 13 villages of high literacy and 13 villages of low literacy from Muktsar were also randomly drawn from the sorted village list of this district.

This procedure was thought essential under the presumption that the sample of villages so selected would provide a sufficient literacy gap between the two sets of villages which would eventually provide a better analysis, interpretation and understanding of the problem under investigation.

The selection of the villages was done with utmost care. Only that village was picked up which fulfilled the required criterion (shown below). Apart from the literacy figures, some additional aspects were also taken into account while selecting a village (and thereby the school and the VEDC). The details are as follows:

1. The village having a reasonably good number of households (at least 150) with at least one primary school. This was considered essential to have a
better understanding of the dynamics of community participation in the management of the specific school.

2. To have a better analysis and interpretation of the problem under investigation, the VEDCs perceived as reasonably good (by the Education Department officials like the Block Resource Persons (BRPs), Cluster Resource Persons (CRPs) and the District Resource Persons (DRPs) have been purposively chosen for the Sample.

3. In order to ensure reliable, valid and systematic collection of essential data, only those VEDCs were identified which were formed after the June 2003 Panchayat elections and before the May 2008 Panchayat elections.

3.3.3 Selection of Respondents

A total of 411 members of the VEDCs and 99 school teachers constituted the sample for the present study. The members of the VEDCs comprised of Head Teachers, Panchayat members, members of the PTA, Ex-servicemen, Retired teacher and Philanthropist/NRIs.

3.3.4 Selection of Members of VEDCs

All the members of the 52 VEDCs selected for the sample (26 VEDCs from Mansa and 26 VEDCs Muktsar) formed the sample for the present study. As a VEDC usually has 08 members, a total of 416 VEDC members were initially planned to be interviewed. However, 05 VEDCs members could not be interviewed due to death, unavailability and unwillingness of these members. Thus the final sample consisted of 411 VEDCs members (206 from district Mansa and 205 from district Muktsar).

3.3.5 Selection of Teachers

From the selected 52 Rural Primary schools (26 Rural Primary schools from Mansa, 26 rural Primary schools from Muktsar, 02 teachers from each school were random chosen for the sample of teachers. Though, this sample has to be 104 but 05 teachers could not interviewed due to unwillingness and unavailability (vacancy). This way, the sample consisted of 99 teachers (49 teachers from Mansa and 50 teachers from Muktsar).
Table 3.1: Sample of Villages (thereby the Schools and VEDCs)

<table>
<thead>
<tr>
<th>Literacy</th>
<th>Mansa</th>
<th>Muktsar</th>
<th>Both Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>High literacy</td>
<td>13</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Low literacy</td>
<td>13</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>26</td>
<td>52</td>
</tr>
</tbody>
</table>

Sample of VEDC Members

<table>
<thead>
<tr>
<th>Literacy</th>
<th>Mansa</th>
<th>Muktsar</th>
<th>Both Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>High literacy</td>
<td>104</td>
<td>104</td>
<td>208</td>
</tr>
<tr>
<td>Low literacy</td>
<td>102</td>
<td>101</td>
<td>203</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td>205</td>
<td>411</td>
</tr>
</tbody>
</table>

Sample of Teachers

<table>
<thead>
<tr>
<th>Literacy</th>
<th>Mansa</th>
<th>Muktsar</th>
<th>Both Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>High literacy</td>
<td>26</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td>Low literacy</td>
<td>23</td>
<td>24</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>50</td>
<td>99</td>
</tr>
</tbody>
</table>

Table 3.2: Sample of VEDCs members segregated as per Positions

<table>
<thead>
<tr>
<th>VEDCs Members (Position-wise)</th>
<th>District Mansa</th>
<th>District Muktsar</th>
<th>Total (N=52)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Literacy</td>
<td>Low Literacy</td>
<td>Total Villages (26)</td>
</tr>
<tr>
<td>Head Teachers</td>
<td>13</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Panchayat Members</td>
<td>26</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td>PTA Members</td>
<td>26</td>
<td>25</td>
<td>51</td>
</tr>
<tr>
<td>Ex-Servicemen</td>
<td>13</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Retired Teachers</td>
<td>13</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>Philanthropists/NRIs</td>
<td>13</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>104</strong></td>
<td><strong>102</strong></td>
<td><strong>206</strong></td>
</tr>
</tbody>
</table>

3.4 Tools used for the study

The following tools were used for the collection of data.

1. Interview Schedule for the members of VEDCs.
2. Interview Schedule for the teachers.
3. School Information Questionnaire.

The Structured Interview Schedule for the members of the VEDCs was developed by the researcher in order to assess the functioning of VEDC (This is given as Appendix-A).
The Structured Interview Schedule for the teachers was developed by the researcher in order to know the views of the teachers on selected aspects on the working of Villages Education Development Committees (This is given as Appendix-B).

The School Information Questionnaire was developed by researcher for studying the general facilities available in the schools monitored by the VEDCs selected for the sample (This is given as Appendix-C).

3.5 Development and Description of Tools

A brief description and development of the tools used in the study is given under.

3.5.1 Pilot Survey

In order to get a better insight into the functioning of Village Education Development Committees, a pilot survey was conducted by the researcher by visiting six villages for obtaining information from the members of Village Education Development Committees as also from other stakeholders like the teachers, Cluster Resource Persons (CRPs) and the personnel of the State Education Department. Pilot Survey was considered essential primarily to get information from the actual field settings and for exploring various issues necessary for preparing the tools for the study.

3.5.2 Preparation of the Interview Schedule for the VEDC Members

On the basis of the study of literature, information gathered during pilot survey, a list of items covering different aspects regarding the functioning of VEDCs was prepared. The schedule so constructed was presented before some of the subject experts in the annual seminar of the Department of Education and Community Services, Punjabi University, Patiala for suggestions. The schedule was then modified and discussed with the experts once again. Thereafter, the modifications were again carried out in the light of the suggestions. After thoroughly analyzing whether the modified draft of the Schedule covered all the required dimensions desired to be investigated in this study, the Schedule of VEDC members was readied for the try out.
Try-Out and Revision of the VEDCs Member Schedule

In order to assess the accuracy and precision of the Schedule of VEDC members, it was tried-out by the researcher on a small group of members of the VEDCs in the area of the study. The try-out was considered essential to identify and remove the ambiguities and to ensure that the items presented therein communicated what exactly was intended. After the field try-out necessary corrections were made and the Interview Schedule was discussed with the subject experts for further refinement. After incorporating all the try-out responses, the final draft of the Interview Schedule was prepared for the purpose of data election.

The Structured Interview Schedule for members of the Village Education Committees has five main dimensions viz. Personal Characteristics of the VEDCs members, Awareness of members about composition, formation and functions of VEDCs, Activities of the VEDCs, Problems faced by VEDCS and the Suggestions to strengthen these bodies. The Interview Schedule was designed and used for the present investigation only and was not intended to be used in future for other studies. The final draft of this tool is given as Appendix-A.

3.5.3 Preparation of Teacher’s Interview Schedule

A Structured Interview Schedule was designed to know the views of the teachers (employed in the schools in the sample) on the selected aspects of the working of the VEDCs. Based on the information gathered from the available literature and the responses elicited during the pilot study, an exhaustive list of items was prepared on various aspects pertaining to the research problem in hand. The interview schedule was then given to subject experts for further suggestions and comments. After incorporation of the suggestions, the Schedule was modified for the try-out on the teachers.

Try-Out and Revision of the Teacher’s Interview Schedule

Structured interviews were conducted on a small group of teachers for the purpose of removing the ambiguities and to examine the relevance of each item/question given in the Schedule. During the interviews, it was felt that a few questions did not seem effective to elicit the correct opinion of the teachers which, thereafter, were removed and replaced by new questions/items relevant to the context and the
objectives of the study. The tool was then discussed with the subject experts for suggestions and finalized after further modifications.

The Structure Interview Schedule for teachers has two main dimensions viz. Personal characteristics of the teachers, Views of the teachers about the working of the VEDCs. The Interview Schedule was designed and used for the present investigation only and was not intended to be used in future for other studies. The final tool is given as Appendix-B.

3.5.4 Preparation and Try-Out of School Information Questionnaire

The School Information Questionnaire was designed by the researcher to know about the availability of general facilities in the sampled schools. By studying the school schedules already prepared for similar purposes by the institutions like National Council of Educational Research and Training (NCERT), National University of Educational Planning and Administration (NUEPA) and State Council of Educational Research and Training (SCERT), the School Information Questionnaire was prepared as per the context and the objectives of the present study.

The School Information Questionnaire has two parts: (1) Infrastructural facilities (2) Information regarding Enrollment, School Results and Drop-outs. Part one included facilities like drinking water, electricity, toilets, furniture for teachers and students, boundary wall, playground, telephone, computers and so on where as Part two consisted of items related to class-wise enrollment, school drop-out and school-result in terms of the number of passes and the failures from 2000 to 2006. The finalization of this Questionnaire was done after seeking the suggestions of the subject experts and on the basis of try-out as was done for other two schedules. The Interview Schedule was designed and used for the present investigation only and was not intended to be used in future for other studies. The final draft of the School Information Questionnaire is given as Appendix-C.

3.6 Data Collection

For data collection, only those VEDCs were identified from the sampled villages which were constituted during the period falling between two panchayat elections held in June 2003 and May 2008. All the data collection tools were administered in a systematic manner. The researcher visited the identified villages during December 2008 and thereafter visits were made during April 2009, July-
August 2009 and December 2009. During these visits, interviews of VEDC members and the teachers were conducted with the help of pre-designed structured interview schedules for getting the required information. Along with this, the information was also gathered relating to the school infrastructure, students’ enrollment, drop-out and the school results with the help of pre-designed School Information Questionnaire. The information relating to students’ enrollment, drop-out and the school results was collected for three years before the formation of VEDCs (i.e. 2000-2003) and three years after the formation of VEDCs (i.e. 2003-2006).

3.7 Data Analysis

For the purpose of data analysis, the frequencies of the responses of the VEDCs members and the school teachers were counted and the percentages were calculated. The responses of the open-ended questions/items were analyzed keeping in view the nature of the data. The qualitative data requiring description was analyzed accordingly. The questions in the schedules and questionnaire were pre-coded for easy analysis and tabulation.

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