CHAPTER III
Methodology

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3.0 INTRODUCTION

In order to meet the objectives of the study, - both quantitative and qualitative information were required. Quantitative information was required in terms of students' enrolment, drop out, attendance, etc. The qualitative information needed for the research was procured by way of personal visits, interviews, meetings, discussions and observation.

3.1 Sampling strategy

The information on the government upper primary schools of the Narmada district was procured from the District MIS (Management Information System), SSA Narmada in the March 2014. All the Gujarati medium government upper primary schools of the Narmada district were treated as the population. In the 393 upper primary schools 12,399 girl children and 12,951 boy children were enrolled. There were 393 head teachers and 859 upper primary teachers in these schools. A multi- stage sampling procedure was adopted to select schools from four blocks. Out of the total number of upper primary schools of each block, 10 per cent were randomly selected as sample. In the sampled schools there were 2,228 boy children 2,080 girl children, 42 head teachers and 123 upper primary teachers. All head teachers from the sampled school were selected as sample. 2 upper primary teachers, 3 girl students from each upper primary standards i.e 6, 7 and 8 (3x3=9) and their parents were randomly selected. However, in case the parents of the same girl child selected as sample were not available, data from the available parents whose daughter was studying in the upper primary section of the school was accepted. The District Primary Education Officer (DPEO) and the District Gender Coordinator (DGCo.) were included in sample. In total there were 884 respondents.

Table 3.1 Scheme of sampling

Block	Total number of upper primary schools (2013-2014)	Schools sampled for the study (10%)	Number of head teachers	Number of upper primary teachers (2 from each school)	Number of girl children (3 from each standard)				Parents of the girl children				DPEO*	DGCo.#
					Std. 6	Std. 7	Std. 8	Total	Std. 6	Std. 7	Std. 8	Total		
Nandod	173	18	18	36	54	54	54	**162**	54	54	54	**162**		
Tilakwada	52	6	6	12	18	18	18	**54**	18	18	18	**54**	1	1
Dediapada	94	10	10	20	30	30	30	**90**	30	30	30	**90**		
Sagbara	74	8	8	16	24	24	24	**72**	24	24	24	**72**		
Total	393	42	42	84	126	126	126	**378**	126	126	126	**378**	**1**	**1**

* District Primary Education Officer
\# District Gender Coordinator

Diagram 3.1 Scheme of sampling

Total Respondents
884

District Primary Education officer
1

District Gender Coordinator
1

Blocks

Blocks

| Tilakwada 6 | Nandod 18 | Head teachers 42 | Dediapada | Sagbara 8 |

| Tilakwada 12 | Nandod 36 | Teachers 84 | Dediapada | Sagbara 16 |

| Tilakwada 54 | Nandod 162 | Parents 378 | Dediapada | Sagbara 72 |

| Tilakwada 54 | Nandod 162 | Girl Children 378 | Dediapada | Sagbara 72 |
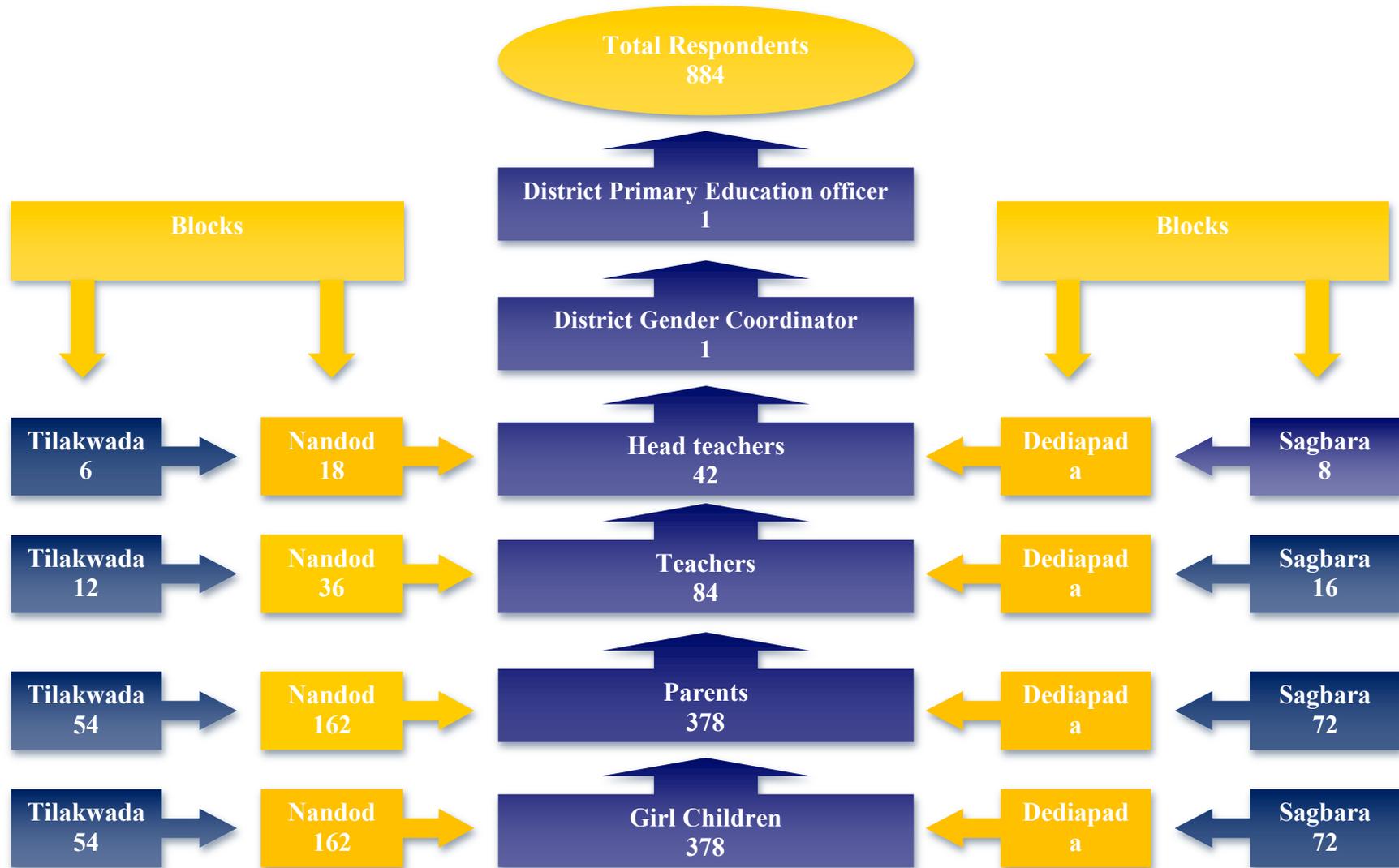
Table 3.2 List of sampled schools from Nandod block

Block	Sl. No.	Upper Primary School	Village/Town
Nandod	1.	Primary School Vavdi	Vavdi
	2.	Primary School Mangrol	Mangrol
	3.	Primary School Patana	Patana
	4.	Primary School Dholar	Dholar
	5.	Primary School Ringani	Ringani
	6.	Primary School Virpor	Virpor
	7.	Primary School Garudeshwar	Garudeshwar
	8.	Veer Birsamunda Primary School No. 5	Rajpipla
	9.	Primary School Khojalvaasa	Khojalvaasa
	10.	Primary School Motaraipura	Motaraipura
	11.	Primary School Kalimakwana	Kalimakwana
	12.	Primary School Vagadiya	Vagadiya
	13.	Veer Bhagat Singh Primary School No. 1	Kevadiya Colony
	14.	Primary School Hirapura	Hirapura
	15.	Primary School Kumasgam	Kumasgam
	16.	Primary School Navaghanta	Navaghanta
	17.	Primary School Shehraw	Shehraw
	18.	Primary School Amletha	Amletha

Table 3.3 List of sampled schools from Tilakwada block

Block	Sl. No.	Upper Primary School	Village/Town
Tilakwada	1.	Tilakwada Primary School	Tilakwada
	2.	Alampura Primary School	Alampura
	3.	Utavadi Primary School	Utavadi
	4.	Gamod Primary School	Gamod
	5.	Devaliya Primary School	Devaliya
	6..	Vajeriya Primary School	Vajeriya

Table 3.4 List of sampled schools from Dediapada block

Block	Sl. No.	Upper Primary School	Village/Town
Dediapada	1.	Nivalda Primary School	Nivalda
	2.	Khokharaumar Primary Shcool	Khokharaumar
	3.	Navagam Primary School	Navagam
	4.	Bharada Primary School	Bharada (Re)
	5.	Sabuti Primary School	Sabuti
	6.	Khatam Primary School	Khatam
	7.	Motisinghloti Primary School	Motisinghloti
	8.	Nanisinghloti Primary School	Nanisinghaloti
	9.	Junamozda Primary School	Junamozda
	10.	Khaidipada Primary School	Khaidipada

Table 3.5 List of sampled schools from Sagbara block

Block	Sl. No.	Upper Primary School	Village/Town
Sagbara	1.	Ghodadevi Primary School	Ghodadevi
	2.	Sagbara Primary School	Sagbara
	3.	Kodba Primary School	Kodba
	4.	Pankhala Primary School	Pankhala
	5.	Pat Primary School	Pat
	6.	Taval Primary School	Taval
	7.	Bhoramli Primary School	Bhoramli
	8.	Gotpada Primary School	Gotpada

3.2 Tools and techniques

Questionnaires (Appendices 1 to 4) were developed for girl children, teachers and head teachers for **objectives 1(i) to 1(v)**. For each of the objectives responses were elicited from all the intended respondents i.e. girl children, teachers, head teachers, District Gender Coordinator, District Primary Education Officer. Each item, either in the questionnaire or in the interview schedule, was chosen keeping in perspective how the problem of girl child education relates to the respondent. The exercise was important as experience with the phenomenon decides attitude/view/stance/ of an individual and girl children, teachers, head teachers, and administrators all are differently faced with the problems of girl child education. Here, the intention was to collect/record (and later meaningfully assemble) information from all the individuals and sections of people concerned with the issue. Questionnaires were framed in such a manner that respondents may not feel constrained only with the listed options. The last option was kept 'open' with a blank to fill in, in case of the respondent wanted to add something of her own. Moreover, personal experiences, opinions, views and suggestions were sought by way of queries seeking a brief description. Semi-structured interview schedules were developed for the District Primary Education Officer (DPEO) and District Gender Coordinator (DGCo.) (Appendices 7 and 8). For **objective 1 (iv)**, namely *to study the facilities and support available to girl children*, besides

questionnaires an **observation schedule** (Appendix 5) was felt necessary to capture the extent of coverage and quality of facilities in some close details. The observation schedule was comprised of four facility related aspects; (i) Girl children's toilet (ii) Mid-day meal (iii) Games for girl children (iv) Participation of girls in school and school related activities. For **objective 2** namely, *to study the perception of parents on girl child*, a perception scale (Appendix 6) was developed. The scale had 25 statements seeking rating of each on three options; 'Agree', 'Disagree' and 'Indecisive'. For **objective 3** namely, *to study the socio-economic status of girl child,* **a questionnaire** seeking information on the socio-economic status of girl children was developed.

All tools were prepared after referring to the relevant literature. An extensive consultation with academicians was carried out. Inputs from persons with domain knowledge were sought. In case of questionnaire for socio-economic status, it was referred to the academicians working in the field of Economics. As all tools were in Gujarati language, for linguistic corrections they were referred to the Gujarati language experts. All suggestions/inputs/corrections were considered before final drafting of tools. Try outs on 50 urban and 50 rural girl children were carried out. Necessary changes and corrections were made before the actual administration of the tools. Fields visits were recorded in the forms of videos, photographs, field diaries and field notes.

Diagram 3.2 Respondents and tools employed
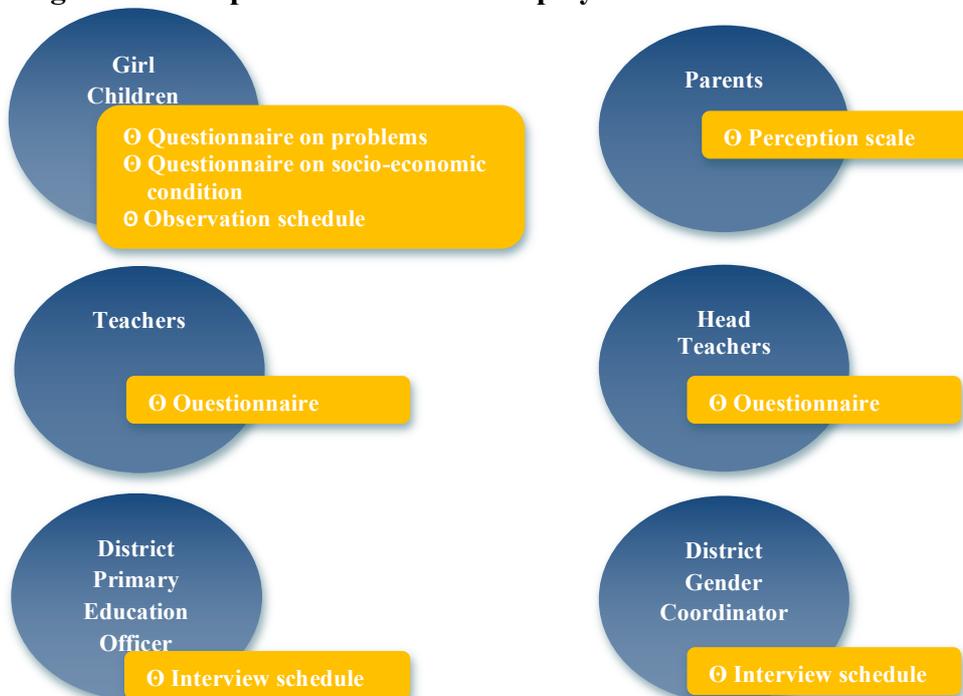
3.3 Data collection

Data were personally collected. A set containing 30 questionnaires was prepared for the each sampled school. Each set was coded corresponding with the initial letters of the block e.g. for Nandod total 18 sets were prepared each having code from Set N-1 to Set N- 18. In total 42 such sets were prepared for 42 schools from all 4 blocks. Each set contained following items in them.

Table 3. 6 Number of items per set prepared for school

Sl.	Item	Quantity
1.	A copy of the letter from the District Primary Education Officer Narmada, stating to render necessary cooperation to the researcher (Appendix - 10)	1
2.	Questionnaire for head teacher (Appendix - 3)	1
3.	Questionnaire for the upper primary teachers (Appendix - 2)	2
4.	Questionnaires for girl children of upper primary section (Appendix - 1)	9 (3 from each standard)
5.	Socio-economy questionnaire for girl children of upper primary section (Appendix - 4)	9 (3 from each standard)
6.	Perception scale for girl children's parents (Appendix - 6)	9
7.	A copy of return pro forma (Appendix - 11)	1
8.	Total	32

The schools were personally visited and data were collected. The data collection work from the field was started in the March 2014. Discussions were held with the head teachers and the teachers of upper primary section. It was during the discussion that the questionnaires were filled. If queries and confusions arouse it was sorted out there. There were incidents in which the respondents wanted some time to record their response. This happened due to the reasons such as; they needed time to get accurate information from the records (in case of head teachers who wanted time for providing data on enrolment and dropout) and if they were occupied with some other work. In such cases whatever was possible was recorded; for the remaining information they were requested to fill the information and send it back through post. Ticketed envelops were provided to the respondents. The help of local teacher was taken when necessary; especially in procuring information from parents. In the cases where insufficient or

unclear information was received, the school was contacted through registered posts. On the return of the questionnaires the school head teacher would put his seal and signature 'a return pro forma' (Appendix 11). After the field visits, 9 schools were found which either did not provide complete information or provided unclear information. They were regularly followed up telephonically and by registered post. Finally, by the April 2015 questionnaires from 42 head teachers, 84 upper primary teachers, 378 girl children and 349 parents were collected. Interview schedules with District Primary Education Officer and District Gender Coordinator, Narmada were held. Both interviews were video recorded.

3.4 Data analysis

Frequencies were calculated and converted into percentages for each response. Frequency and percentage both have been stated in tables. The frequency has been indicated with the letter 'f' and percentage with the sign '%' at the top of the column. Block wise percentages have been calculated with an object to present block wise representation from each block in the entire sample. The block wise percentages were arrived at by taking into consideration the block wise frequencies and the entire sample (e.g. 378 in case of girl children), within block percentages were arrived at by taking into consideration the frequencies within block and total sample units in that particular block (e.g. 162 girl children in case of Nandod). As the sample was proportional at 10 per cent schools from each block, within block calculation has also been felt necessary mainly because of the two reasons; first - to make meaningful block wise comparison possible and second – singularly looking at the proportion of percentages from each block may mislead to an inaccurate conclusion e.g. the block wise proportions of daily wage earners in the Narmada district were; 8.9 per cent in Nandod, 6.4 per cent in Dediapada, 4.5 per cent in Sagbara and 3.2 per cent in Tilakwada. Looking at these figures one may tend to conclude that the problem of girl children working as daily wage earners was more in Nandod. However, it is the within block analysis which makes it possible to see the facts in proper perspective. Within block analysis revealed that 21.0 per cent girl children in Nandod, 22.2 per cent in Tilakwada, 26.7 per cent in Dediapada and 29.2 per cent in Sagbara worked as daily wage earners in the Nandod block. Hence, in comparison to other blocks, in Sagbara the problem of daily wage earners girl children was more and not in Nandod as it appeared in the block wise analysis. In case of multiple response type questions all checked options by a respondent have been calculated. However, it has been taken care that checked

responses do not mutually contradict. Most of the multiple response type questions had two divisions a 'lead question' often ending with conditional clauses 'if yes' or 'if no' followed by 'linked questions' - which were options seeking further specific information from the respondents on the 'lead question'. Missing data in the case of such multiple response type questions with two divisions, 'lead' and 'linked' questions, were analysed with rational assumptions. In case if the respondents had missed the 'lead question' but had checked any of the succeeding 'linked options', such respondents were taken into account for lead question also. But in the reverse case where the respondents had checked only the 'lead question' but not any of the 'linked options', the responses were taken into account for 'lead question' only. (See Table 4.30) The option that received the highest frequency has been places at the top in the table followed by the options receiving lower frequencies. Hence, the options in the tables are in descending order in terms of their frequencies. Meaningful and optimal presentation of the available data has been attempted. Content analysis of the data obtained through interviews, field notes and descriptive responses was done. Cross references have been made wherever needed. To illustrate the point more clearly tables and graphs have been used.

Objective wise analysis has been done. The summary is presented after the analysis of each objective. The order of the presentation of the data analysis is: girl children, teachers, head teachers, District Primary Education Officer, District Gender Coordinator and (in case of objective 1(iv)) researcher's observation.