CHAPTER - IV

PROCEDURE, DATA COLLECTION AND ANALYSIS

4•1	Classification of the Study
4.2	Sources of Data
4.3	Manner of Approach and Tools Used
4.4	Tabulation of Data

4.5 Analysis of Data

CHAPTER - IV

PROCEDURE, DATA COLLECTION AND ANALYSIS

4.1 Classification of the Study

The present study which was undertaken with a view to bringing about a quantitative as well as a qualitative improvement in the standard of school education in Goa, may be classified as a descriptive survey of the existing facilities for school education, pre-service and in-service training of school teachers, and inspection and supervision of schools, in Goa. Data have been collected by referring to official records and also by questionnaire and interview schedules. Thus the present study is based on the study of records on the one hand and collection of data specially about teacher education, inspection and supervision on the other.

4.2 Sources of Data

Various data relevant to different aspects of the study were collected from the following sources:

- i) The Department of Census Operations for Goa, Daman and Diu and Dadra and Nagar Haveli, Panjim, Goa.
- ii) The 1971-Census Publications for the Union Territory of Goa, Daman and Diu,
- iii) The Bureau of Economics and Statistics of the Government of Goa, Daman and Diu, Panjim, Goa,
 - iv) The Planning and Development Department of the Secretariat: for the Government of Goa, Daman and Diu, Panjim, Goa.
 - v) The Directorate of Education of the Government of Goa, Daman and Diu, Panjim, Goa.
 - vi) The Planning and Statistics Section of the Directorate of Education, Panjim, Goa.
- vii) The Government Teacher Training College, Porvorim, Goa.
- viii) Sri Damodar D.Ed. Training College, Margao, Goa.
 - ix) Samaj Seva Sangh Training College, Margao, Goa.
 - x) Nirmala Institute of Education, Altinho, Panjim, Goa.
 - xi) The Extension Department of Nirmala Institute of Education, Altinho, Panjim, Goa.
 - xii) The All-Goa Secondary Teachers' Association, Margao, Goa.
- xiii) The Headmasters' Association, Panjim, Goa.
 - xiv) The Primary Teachers' Association, Panjim, Goa.
 - xv) The Block-Development Office, Margao, Goa.
 - xvi) The Diocesean Society for Instruction, Altinoho, Panjim, Goa.
- xvii) The Land Survey Department of the Government of Goa, Daman and Diu, Panjim, Goa.
- xviii) The Archives and Museums Department of the Government of Goa, Daman and Diu, Panjim, Goa.

xix) The Directorate of Sports and Cultural Affairs, Panjim, Goa.

* * * - _ _

- xx) Survey and Data Processing Unit of the National Council of Educational Research and Training, New Delhi.
- xxi) National Staff College for Educational Planners and Administrators, New Delhi.

4.3 Manner of Approach and Tools Used

The necessary information, educational statistics and other relevant data were collected after careful examination of the official records in the Departmental files, Committee reports, Survey publications, Inspection reports and other printed matter available at the state, districts, taluka, village and institutional levels.

The investigator visited New Delhi for consulatation and collection of relevant data from the National Staff College for Educational Planners and Administrators, as well as from the Survey and Data Processing Unit of the NCERT, which is presently engaged in the preparation and publication of the Final Report of the Third All-India Educational Survey.

The investigator also collected a lot of valuable information by visiting various schools and other educational institutions situated in different towns and villages of Goa, and made on the spot observations regarding their location and size, physical amenities and maintenance, organisation and activities, and efficiency and effectiveness in general.

a file and a transfer that the control of the contr

These visits also provided a good opportunity to discuss in an informal manner, the problems of growth and development as well as the qualitative and quantitative improvement of school education in Goa, with the principals and heads of schools, teachers and supervisors, student community and management personnel, parents and local leaders and various other members of the community.

For the purpose of identifying and surveying the location of school facilities presently made available in Goa, the investigator compiled three different registers, partly from the data already collected by the Third All-India Educational Survey Unit from New Delhi and partly from the information available in the departmental files of the Directorate of Education in Goa. The first register refers to all the talukas of Goa, and provides information regarding the land, area, rural/urban population and the number of the existing towns and villages in each taluka of Goa.

The second register contains the names of all the Panchayat villages and township areas as well as the details of their population and the existing number of habitations in each one of them.

The third register deals with all the habitations in Goa and provides information regarding the population and the number of facilities that are made available in each habitation for different levels of school education in Goa.

With the help of the information contained in these registers, the investigator prepared an educational map after identifying every village in an outline map of each of the eleven talukas of Goa. Specific symbols are used in these maps to indicate the number of different types of school facilities made available in each village and town as on September 30, 1976.

The investigator also prepared three other maps for each educational zone of Goa and indicated thereon the prospective needs of each village and town based on the terms of the set criteria.

With a view to present a complete picture of the existing facilities already identified in each of the eleven taluka maps of Goa, in combination with those proposed and identified in the three zonal maps of the educational zones of Goa, the investigator prepared a consolidated educational map for the whole of Goa and marked therein the school facilities for every panchayat village and town of the eleven talukas of Goa as indicated in the Perspective Plan proposed for the development of school education in Goa.

With regard to the information and data in respect of the needs and problems connected with the teacher education in Goa, the investigator made use of the departmental file records and statistics for identifying the pre-service needs of school teachers in Goa with a view to prepare a Perspective Plan to cater to the needs of new entrants to the teaching

profession as well as to help to clear the present backlog of untrained teachers in Goa by the end of the Dixth Five Year Plan. In the case of in-service training needs of school teachers in Goa, the investigator prepared a special questionnaire to seek the opinion of personnel mainly connected with the field of school education in Goa, so that a Tentative Schedule could be preapred to ensure participation of every teacher in Goa, in the in-service training programme, at least once in a period of five years.

Regarding the provision of school inspection and supervision in Goa, the investigator gathered most of the information and data by interviewing a selected number of persons directly involved in the specified area of work. Additional information was also obtained from the departmental files, school records and inspection reports for the purpose of preparing a Perspective Plan to improve the quality and effectiveness of school inspection and supervision in Goa.

In general, the investigator also had informal interviews with some of the leading politicians, professionals and retired educationalists of repute, regarding the ways and means of improving the qualitative aspect of education in general and of school education in particular.

4.4 Tabulation of Data

The tabulation of the data is presented in the following Tables begining from Table IX to LI

Table No.IX: Talukawise Panchayat Villages, Habitations and Rural Population of Goa, 1971.

T.T					
Sr. No.	Taluka	No.of Panchayat Villages	No. of Habitations	Rural Population Average per Habitation	(1971) Total
, 1	Pernem	18	129	387.4	49,976
2	Bardez	30	204	404.0	104,102
3	Bicholim	16	96	519.2	49,839
4	Satari	11	77	383.0	29,593
			-,-,-,-,-		
Sub	-Total for Nor Zone	th 75	5 06	461.5	233,510
5	Tiswadi	18	106	439.1	46,551
6	Ponda	19 -	178	432.2	76,932
. 7	Sanguem	1.1	137	288.9	39,582
Sub	-Total for Cen Zone	 ntral 48 	421	387.3	163,065
. 8	Mormugao	5	64	335.1	21,446
9	Salcete	29	385	278.1	107,083
10	Quepem	14	138	279.9	38,622
11	Canacona	8	87	323.6	28,151
Sub Zone	Total for Sout	th 56	674	289.8	195,302
= = =	All Goa	179	1601	369.7	591,877

Source of Data: Third All India Educational Survey, Goa, Daman and Diu State Tables Vol.I.P.27.

Table No. X: Talukawise Rural Habitations of Goa Arranged According to Population Slabs *

Source of Data : Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

Table: XI Talukawise Urban Areas and Population of Goa, 1971 * 95

Sr.No.	Taluka	7	TOWNSHIE	
	A A A A	No.	Name	Pupulation (1971)
1	Pernem	1	Pernem	2,930
2	Bardez	1	Mapusa	20,001
3	Bicholim	1	Bicholim	8,550
4	Satari	games de valencieses -	Valpoi	2,922
		4	Towns	34, 403
5	Tiswadi	1	Panjim	59,258
6	Ponda	1	Ponda	7,658
7	Sanguem	1	Sanguem	5,006
		3	Towns	71,922
8	Mormugao	1	Vasco	44,065
9	Salcete	1	Margao	48,593
. 10	Quepem	1	Quepem	2,925
11	Canacona	1	Chauri	1,335
		4	Towns	96,918
	All Goa	11	Towns	203,243
	All Goa Aver Town	age Po	pulation Per	18,476.6

^{*} Source of Data : Census of India - 1971 - District Census Hand Book, Goa, Daman and Diu.

TABLE - XII

Talukawise Recognised Institutions for School Education in Goa as on Sept. 30, 1976*

No. of Lower Primary Level School Pernem	No. of Lower Secondary School	No. of Higher	This cam cadis and
71 71 85 88 88 315 to 36.25 57 138 99 cor 294 to Total 33.83 26 114	۲-	Secondary School	דמרון ומדחיים
Bicholim 71 Bardez 85 Satari 88 Sub-total of 315 Percentage to jotal 36.25 Tiswadi 57 Ponda 99 Sub-Total for Central Zone 294 Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	O -i	Т	106
Bardez 85 Satari 88 Sub-total of North Zone iotal 315 Percentage to iotal 36.25 Tiswadi 57 Ponda 99 Sanguem 99 Sub-Total for Central Zone 294 Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	6		95
Satari 88 Sub-total of North Zone 315 Percentage to Total 36.25 Tiswadi 57 Ponda 99 Sanguem 99 Sub-Total for Central Zone 294 Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	47	2	149
Sub-total of North Zone 315 Percentage to iotal 36.25 Tiswadi 57 Ponda 99 Sanguem 99 Sub-Total for Central Zone 294 Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	2	**	102
Percentage to jotal 36.25 Tiswadi 57 Ponda 138 Sanguem 99 Sub-Total for Central Zone 294 Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	74	4	452
Tiswadi 57 Ponda 138 Sanguem 99 Sub-Total for Central Zone 294 Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	33.18	28.58	37.29
Ponda 138 Sanguem 99 Sub-Total for Central Zone 294 Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	33	ന	102
Sanguem Sub-Total for Central Zone Percentage to Total 33.83 Mormugao Salcete Quepem 65	25	*****	169
Sub-Total for Central Zone 294 Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	12		112
Percentage to Total 33.83 Mormugao 26 Salcete 114 Quepem 65	70	సై	383
Mormugao 26 Salcete 114 Quepem 65	31,39	35,71	31.60
Salcete 114 Quepem 65	13		47
Que pem 65	50	m	8/1
	7	1	1 (8
13 Canacona 55 9	6		/44
14 Sub-Total for South Zone 33	79	1	377
to Total	35,43	35.71	31.11
5 Grand Total 869 106	, 223	1.4	7777

Talukawise Distribution of Schools in different stages $\alpha_{\rm CC}$ ording to Management in Goa as o'n September 30, 1976 * Table: XIII

. 6			Schools		֭֭֓֞֜֜֜֝֜֜֜֜֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֜֝֓֡֓֡֓֡֓֡	1.1.1 diffe		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	! ! !	! !	1 1 1		
o Z	***************************************		LP	d d	LS	HS	HS LP +UP	LP + UP +	+ + dD	UP LS	UP + LS +	+ SI + SE	for all stages.
•		,		***************************************		1		LS	+ S1		竖		
-;			71.	5.	10	~!		i	21.	=;			
-	Pernam	i) Govt.	71	ı	Н		. 02	1	l	2,	l	ŧ	95
		ii) Non-Govt.	1	ч	ı	ı	ı	ţ	1	10	ı		11
		iii) Total	7.1	-1	Н	-	20	ı	ì	12	ı	1	106
N	Bardez	i) Govt.	85	1	디	ı	Ħ	,	ı	H	1	AMP - ALICAN CONTRACTOR AND	86 .
		ii) Non-Govt.	1	ო	0	N	2	25	ı	18	ı	ı	51
		iii) Total	85	m	8	2	12	25		19	•	***	149
ო	Bicholim	i) Govt.	69	1	1	ı	13	1	ı	က	ı		85
		ii) Non-Govt.	2	Į	1	ı	Н	0	-1	4	ı	ī	10
		iii) Total	71	1	1	1	14	2		7			95
4	Satari	i) Govt.	88	I	1	1	6	1	1	2	1	1	66
		ii) Non-Govt.	ı	ı	0	1	1	1	l	-	1	ı	m
T-FEET		iii) Total	88	ı	2	ı	6	-	1	က	L	***************************************	102
Ŋ	Sub-Total	i) Govt.	313	1	2	H	53	1	1	8	***	1	377
	tor North	ii) Non-Govt.	7	4	4	2	2	27	-	33	1	ı	75
		iii) Total	315	4	9	3	55	27	r-1	41	•	-	452
9	Tiswadi	i) Govt.	50	1	Н	1	α		1	***************************************			09
		_	7	ì	1	2		14	1	18	1	1	42
-		iii) Total	57	ı	Ч	7	6	14	 -	18	ı	ı	102
1	• - • - • - • - • - • - •			! 	1	_J !	! !	1	- !	1	1.1.1.1	1.1.1.1.	
												contd	7

Ÿ

Table	le : XIII (contd.	1td.)											
	4		244	6	791	1 N	4	7,- 97	41.	1	/3	77	Ļ
	Ponda	i) Govt.	135		1 1	ഗ 1	۱۵	0.50	1 1	1 1		142	
			138 -			5	1/2	12	1	ı		169	1
80	Sanguem	i) Govt.	- 86	1	1	ı	1 3			1		100	<u> </u>
		ii) Non-Govt.	<u>- 66</u>	1 1	1 1	! !	4 4	08	1 1	1 1		112	1
6	Sub-Total	(;	283 -		1	13	+		<u> '</u>	ı		302	i
	for Central Zone	1.1	294 -	1	22	14	202	2 45 3 49	1 1	1 1		383	<u> </u>
10	Mormugao	1 -	22 -	'	1	9	1	1	-	1		28	<u> </u>
**************************************	}	ii) Non-Govt.	26 1	1 1		7	00	4 4	1 1	1 1	A PARTY CONTRACTOR OF THE PART	19	1
크	Saleete	1 —	105 -	!	1	10	1	2	l l	1		11.7	1
y		iii) Non-Govt.	9 -	1 1	ς (n		34	1 14	1 1	1 1		61 178	<u> </u>
								1	1				-:
12	Quepem	ii) Govt.	63 2 2	1 1	1 1	பவ	1 က	— ო I I	1 1	1 1		60	
			65 1	ı	ı	5	က		1	1		78	
13	Canacone	_	54	1	Н	00	1	, 	1	l		64	
······································		ii) Non-Govt.	1 1	1 1	1	16	mm	0 0	1 1	1 1		74	
17	Sub-Totalfo	1 -	244 -	,	-	99	1		1	-		2.78	- <u>-</u>
 	South Zone	ii) Non-Govt.		1	4	က I	49	- 26′	<u>'</u>	1		66	
		_	260 1	1	2	32	49	9 -	<u> </u>	<u> </u>		377	<u>!</u>
15	Total for	i) Govt.	840 1 00	m <	Nα	95	10	1 16	1 1			957 255	
	911 009	iii) Total	869 5	+ -	10	101	96			1	,	1212	

* Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

Table XIV: Talukawise distribution of School's in different stages according to Management in Rural Areas of Goa as o'n September 30, 1976 *

1 0			1			1	1 6	1 +	1 0			1 6
. i. . O. . X	0 4 5 7 0	1 1 1	LP		ျှ	HS LP I	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	74	10 H 10 H 15 H 15 H 15 H 15 H 15 H 15 H	中 中 1.54 元 5.1 元 5.1	+ SH	all stages.
	ત	'n	#	s.	જ	2	, 			11 12	13	14
T	Pernem	G01	70		-1 1	1	20		2			866
		iii) Total	707		1 -	1 1	20	1 1	108	1 1	1 1	102
N	Bardez		78	1 (1 (1	Ti-	1 6	├	I	ı	06
		ii) Mon-Govt.	78	ကက	2	- 1	12	21	133	1 1		129
m	Bicholim	i) Govt.	63	1] 1	1 1	12	1	11	1 1	1 1	77
		1	9	1		1	13	1			-	84
4	Satari	i) Govt.	87	1 1	1 -	1 1	ω ι	1 1		1 1		96
		iii) Total	87		Ţ		8	1	-	1	-	7.6
Ŋ	Sub-Total for North	i) Govt.	298	14	1	1 1	51	- 22	- 6 - 23	1 1	1 1	356 56
	Zone	iii) Total	300	4	4	1	53	22			1	412
9	Tiswadi	i) Govt.	41	! 1	1 1	1 1	∞ ι	, 0		1 1	1 1	49 24
***************************************		1_	44	1	ı	ı	ω	6	11	1		73
7	Ponda .	i) Govt.	133	1 1	1 1	1 1	ខា		1 1	1 1	1 1	140
_			136	ı	1	1	5	П	12		-	165
ω	Sanguem	-	94	1	1	1	ı	1		1	1	96
	· · · · · · · · · · · · · · · · · · ·	ii) Non-Govt.	95	1 1	1 1	1 1	1 1	m m	1 5	1 1		106
6	Sub-Total for Central	1; (1; (1;	268	1 1	1 1	1 1	13	1 8	1 2 4 4 38		1 1	285
	Zone	iii) Total	275	ı	1	1	13	1-2-1	1 42	,,	-	344contd2

Table: XIV

i	» •	1		<u> </u>		<u> </u>		-		T		
מ/ ו	18	22	94	138	69	9/.	63	2	244	308	885 179	1064
187	· · · · · · · · ·	1	1 1	1	1 1	-	1 1	Pase	. 1 1	1	1 8	ı
7/ -	. ! !			•	1 1	1	general de la constantina della constantina dell		1 1	1	1 1	ı
; ~;	1 1	1	6-	7	1	3	-1 LC	9	14	16	12 75	87
2/	1 1	ı	1 1	I	1 1	-	1 1	1	1 1	1	1 ~	
	14	4	- 28	28	10	2	10	2	36	36	71	71
امن	- I	H	6-1	2	ഥ 1	5	8-	6	23	25	87	91
7	! !	1	1 -1	-	1 1	1	1 1	1	1 -	-	1	-1
9	1 1	1	1 1	,	1 1	ı	1 1	1		1	77	m
lal I	1 1	1	1 1		I —	H	1 1	1	1 -1	٦	19	9
4	17	17	85	92	63 2	65	54 1	55	219	229	785	804
	i) Govt.	iii) Total	i) Govt. ii) Non-Govt.	111/10tal	i) Govt. ii) Non-Govt.	iii) Total	1) Govt. ii) Non-Govt.		i) Govt. ii) Non-Govt.		i) Govt, ii) Non-Govt,	iii) Total
1	10 Mormugao		11 Salcete		12 Quepem		13 Canacona		14 Sub-Total for South	Zone	15 Grand Total for	All Goa.

*Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

Table XV: Talukawise distribution of schools in different stages according to Management in Urban Areasof Goa as 3th September 30, 1976.*

			· · · · · · · · · · · · · · · · · · ·	1	1 1 .			1		1	•		10 1 1 1 1	<u></u>
1 -	Taluka	Item	Sc	Schools	in di	ffer	e nt	ag					Total for	
			LP	db .	പ് പ		LPH L			 보 감		+ ST ST ST	all stages.	
1	હા !		3	10,	اُه	~	H ! ⊗;	SZ.	LS+ HS-1°		HS	(3	7/	
Ъе	Pernem	i)Govt.(U) ii\$Non-Govt.(U)		1 1	1 1	1	1 1 1	1 1		1 00	1 1	1 [C/ C/ 4	
Ba	Bardez	i)Govt,(U) ii)Non-Govt,(U)	7 1	1 1 1	i			1 1 1		1 0 9	1 1 1	P [11	12	
Bj	Bicholim	i)Govt,(U) ii)Non-Govt,(U) iii)Total(U)	010	1 1 1	1 1 1	 		1			1 1 1	1 1 1	8 3	
လိ	Satari	i)Govt. (U) ii)Non-Govt.(U) iii)Total (U)	- 1-	1 1 1	1	1 1	- 1 -	1 1 1		778	1 1 1	1 1	N 2 3	
St.	Sub-Total for North Zone.	i)Govt. (U) ii)Non-Govt. (U) iii)Total (U)	15	1 1 1	7 7 7	H 2/6	212	1		202	1 1 1	1 1	21 19 40	i
H	Tiswadi	i)Govt.(U) ii)Non-Govt. (U) iii)Total (U)	0 4 E	I I I	- 1 -	122	1 5 5			199	1 1	i 1 E	11 18 29	
ď	Ponda	i)Govt.(U) ii)Non-Govt.(U) iii)Total(U)	212	1 1 1	1 1 1						1 1 1	1 1	274	
လိ	Sanguem	i)Govt.(U) ii)Non-Govt.(U) iii)Total(U)	414	1 1 1	1 1 1	1 1 1	1	1 1 1		1	1 1 1	1 1 1	4 (7)	
တ်ပ ိ	Sub-Total for Central Zone	·H ·H ·H	15	111	- I -	100	177	7 7 7			1 1 1	1 1	17 22 39	, ,
			-	-			-		-	-	-	O	contd2	l

Table XV (contd.)

-67831010101010101010
-6 7 89 10 17
-67-87-10 -1 1 1 1 5 597-10 -1 1 1 1 5 51 1
2 2 25 25 25 25 25 25 25 25 25 25 25 25
3 1 2 2 2 1 1 1 1 1 1 1 2 2 1 1 1 2 2 2 1
8 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 2 - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3
3. 11 1 1 1 1 1 1 1 1 1 0 H E
1. 22 22 9 4 5 1 1 22 2 9 6 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
i)Govt.(U) ii)Non-Govt.(U) iii)Total (U) iii)Non-Govt.(U)
10 10 11 11 11 11 11 11 11 11 11 11 11 1

*Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman and Wama Diu.

Table XVI: Talukawise habitations with and without a Lower Primary School/Section in rural areas of Goa as on September 30, 1976 *

•																	1
ion	1.5 kms.	%	·	0.98	1.04	3,90	1.18	10,38	gave.	18,25	8,55	6,26	9.87	13.04	12,64	10.53	7.05
Y School/Section	More	No.	1	7	-	ဇ	9		I	25	36	4	38	18	11	71	113
a Lower Primary	5	**	31.78	51.96	18.75	13	32.61	48.11	28.65	12,41	27.79	5 9.37	62.08	36.96	20.69	51.34	39.23
wit	0-1.5	No.	41	106	18	See and the second seco	165	21	50	16	117	38	239	27	18	346	628
habitations	tion	ેલ્	68.22	47.06	60.21	96.10	66.21	41,51	71.35	70.07	63.66	34.37	28.05	50.00	66.67	38.13	53.72
No. of P	habita	No.	88	96	77	74	335	44	128	96	268	22	108	69	58	257	860
Total	Habita-	tions.	129	204	96	77	506	901	178	137	421	64	385	138	87	674	1601
Taluka			Pernem	Bardez	Bicholim	Satari	Sub-Totalfor North Zone	Tiswadi	Ponda	Sanguem	Sub-Total for Central Zone	Mormugao	Salcete	Quepem	Canacona	Sub-Total for South Zone	1. 0.00
	2			2	е	4	2	9	7	8	6	10	11	12	13	14	15

*Source ofData: Planning and Statistical Section, Directorate of Education Goa, Daman and Diu.

Table XVII: Talukáwise habitations with and without an Upper Primary School/ Section in Rural Areas of Goa as o'm September 30, 1976*

Of habital and publication of tions Within the habitation of tions At a distance of most and stance of tions At a distance of most and stance of most and stance of tions At a distance of most and stance of most and stance of tions At a distance of most and stance of most and stance of tions At a distance of most and stance of tions At a distance of most and stance of tions At a distance of tions	5.7.	Taluka	Total No.	No.	of habitati	ons with	habitations with an Upper Primary School/Section	ry School/Se	ection
No. % No. 3 No. 10.3 No. 10	, ° O N		of habita-		n the		Ø		
Pernem No. % No. % Pernem 129 28 21.71 98 75.97 Bardez 204 42 20.59 154 75.97 Bicholim 96 18 18.75 71 73.96 Satari 77 9 11.69 28 36.36 Sub-Total for 506 97 19.17 35.1 69.37 North Zone 178 28 15.73 123 69.37 Sanguem 137 10 7.23 36 26.35 Sub-Total for 421 61 14.49 234 55.58 . Salcete 385 36 9.35 380 85.71 . Quepem 138 9 6.52 68 49.28 . Canacona 87 17 19.54 42 48.28 South Zone 674 67 9.94 498 73.89 Grand Total			212	-	ation	t	,	I more than	3 Kms
Pernem 129 28 21.71 98 75.97 Bardez 204 42 20.59 154 75.49 Bicholim 96 18 18.75 71 73.96 Satari 77 9 11.69 28 36.36 Sub-Total for 506 97 19.17 351 69.37 North Zone 178 28 15.73 123 69.10 Ponda 178 28 15.73 36 69.10 Sanguem 137 10 7.23 36 99.10 Sub-Total for 421 61 14.49 23.4 55.58 7 Mormugao 64 5 7.81 58 90.63 7 Salcete 385 36 9.35 330 85.71 8 Queperm 138 7 19.54 42 48.28 8 Sub-Total for 674 67 9.94 498 73.89				No.	%		1		%
Bardez 204 42 20.59 154 75.49 Bicholim 96 18 18.75 71 73.96 Satari 77 9 11.69 28 36.36 Sub-Total for North Zone 506 97 19.17 351 69.37 Tiswadi 106 23 21.70 75 70.75 Ponda 178 28 15.73 123 69.10 Sanguem 137 10 7.23 36 26.35 Mormugao 64 5 7.81 58 90.63 Mormugao 64 5 7.81 58 90.63 Salcete 385 36 6.52 68 49.28 Quepem 138 9 6.52 68 49.28 Sub-Total for 674 67 9.94 498 73.89 Sub-Total for 674 67 9.94 498 73.89 Grand Total 160	1	Pernem	129	28	21.71	98	75.97	m	2.32
Bicholim 96 18 18.75 71 73.96 Satari 77 9 11.69 28 36.36 Sub-Total for Tiswadi 106 23 21.70 75 69.37 Tiswadi 106 23 21.70 75 69.10 Ponda 178 28 15.73 69.10 69.10 Sanguem 137 10 7.23 69.10 69.10 Sub-Total for Central Zone 421 61 14.49 234 55.58 7. Mormugao 64 5 7.81 58 90.63 85.71 Quepem 138 9 6.55 68 49.28 7 Quepem 87 17 19.54 42 48.28 85.71 Sub-Total for 674 679 9.94 498 73.89 73.89 Grand Total 160 225 14.05 1083 67.65 7.65	0	Bardez	204	42	20.59	154	75.49	ω	3.92
Satari 77 9 11.69 28 36.36 Sub-Total for North Zone 506 97 19.17 351 69.37 Tiswadi 106 23 21.70 75 70.75 Ponda 178 28 15.73 123 69.10 Sanguem 137 10 7.23 69.10 26.35 Sub-Total for Central Zone 421 61 14.49 234 55.58 . Mormugao 64 5 7.81 58 90.63 . Mormugao 64 5 7.81 58 90.63 . Quepem 138 9 6.52 68 49.28 . Canacona 87 17 19.54 42 48.28 South Zone 674 67 9.94 498 73.89 Grand Total for all Goa 1601 225 14.05 1083 67.65	m	Bicholim	96	13	18.75	71	73.96		7.29
Sub-Total for North Zone 506 97 19.17 351 69.37 North Zone 106 23 21.70 75 70.75 Ponda 178 28 15.73 123 69.10 Sanguem 137 10 7.23 36 26.35 Sub-Total for Central Zone 421 61 14.49 234 55.58 . Mormugao 64 5 7.81 58 90.63 . Mormugao 64 5 7.81 58 90.63 . Quepem 138 9 6.52 68 49.28 Quepem 87 17 19.54 42 48.28 Sub-Total for 674 67 9.94 498 73.89 Grand Total 160 225 14.05 1083 67.65	4	Satari	77	0	11.69	28	36.36	40	51,95
Tiswadi 106 23 21.70 75 70.75 Ponda 178 28 15.73 123 69.10 Sanguem 137 10 7.23 36 26.35 Sub-Total for Canacona 64 5 7.81 58 90.63 Mormugao 64 5 7.81 58 90.63 Salcete 385 36 9.35 330 85.71 Quepem 87 17 19.54 42 48.28 Sub-Total for 674 67 9.94 498 73.89 Grand Total 1601 225 14.05 1083 67.65	വ	(1)	506	16	19.17	351	69,37	58	11.46
Ponda 178 28 15.73 123 69.10 Sanguem 137 10 7.23 36 26.35 Sub-Total for Central Zone 421 61 14.49 234 55.58 . Mormugao 64 5 7.81 58 90.63 . Salcete 385 36 9.35 330 85.71 . Quepem 87 17 19.54 42 48.28 Sub-Total for 674 67 9.94 498 73.89 Grand Total 1601 225 14.05 1083 67.65	9	Tiswadi	106	23	21.70	75	70.75	α	7.55
Sanguem 137 10 7.23 36 26.35 Sub-Total for Central Zone 421 61 14.49 234 55.58 . Mormugao 64 5 7.81 58 90.63 . Salcete 385 36 9.35 330 85.71 Quepem 138 9 6.52 68 49.28 Canacona 87 17 19.54 42 48.28 Sub-Total for South Zone 674 67 9.94 498 73.89 Grand Total for all Goa 1601 225 14.05 1083 67.65	7	Ponda	178	28	15.73	123	01.69	27	15.17
Sub-Total for Central Zone 421 61 14.49 234 55.58 . Mormugao 64 5 7.81 58 90.63 Salcete 385 36 9.35 330 85.71 Quepem 138 9 6.52 68 49.28 Canacona 87 17 19.54 42 48.28 Sub-Total for 674 67 9.94 498 73.89 Grand Total 1601 225 14.05 1083 67.65	ω	Sanguem	137	10	7.23	36	26.35	91	66.42
Mormugao 64 5 7.81 58 90.63 Salcete 385 36 9.35 330 85.71 Quepem 138 9 6.52 68 49.28 Canacona 87 17 19.54 42 48.28 Sub-Total for South Zone 674 67 9.94 498 73.89 Grand Total for all Goa 1601 225 14.05 1083 67.65	6	Sub-Total for Central Zone	421	61	14.49	234	55.58	. 126	29.93
Salcete 385 36 9.35 330 85.71 Quepem 138 9 6.52 68 49.28 Canacona 87 17 19.54 42 48.28 Sub-Total for South Zone 674 67 9.94 498 73.89 Grand Total for all Goa 1601 225 14.05 1083 67.65	10	Mormugao	64	5	7.81	58	90.63	٦	1.56
Quepem 138 9 6.52 68 49.28 Canacona 87 17 19.54 42 48.28 Sub-Total for South Zone 674 67 9.94 498 73.89 Grand Total for all Goa 1601 225 14.05 1083 67.65		Salcete	385	36	9.35	330	85.71	19	4.94
Canacona 87 17 19.54 42 48.28 Sub-Total for South Zone 674 67 9.94 498 73.89 Grand Total for all Goa 1601 225 14.05 1083 67.65	12	Quepem	138	6	6.52	69	49.28		34.20
Sub-Total for 674 67 9.94 498 73.89 South Zone Grand Total 1601 225 14.05 1083 67.65	13	Canacona	87	17	19,54	42	48.28	28	32,18
Grand Total 1601 225 14.05 1083 67.65	14	Sub-Total for South Zone	674	67	9.94	498	73,89	109	16-17
	15	Grand Total for all Goa	1601	225	14.05	1083	67.65	293	18.30

* Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu.

Table: XVIII - Talukawise rural habitations without Primary School facilities in Goa as on September 30, 1976 arranged in Population Slabs based on the needs of lower and upper levels*

 			——					 ,	1				·			·····				
	cion.	13	19,34	•	35,94		10,99	`	61.0		22.15		39.34		10.69		15,41		22,52	-
	Populat Total	12	10,526		37,873		6,284		58		54,741		30,453		9,127		6,306		45,886	
And the second s	tions % to Total	ד סיס ד	30,23		49,02	-	18,75		2, 59		31,42		52.83		26.97		31,39		34,68	
TES	Habitat No.	10	39	and	100		18		2	•	159		55		48		43		146	
L FACILIT	PR IMARY PR Above	2100	1	1	1	8 -1-1-1	1	•	1	1	1	1	1	1	ı	ı	1	1	I	1
PRIMARY SCHOOL ION SLABS	H + C	2100 8	2.3	1708	7	7035	-	1,139		4	10	9882	12	13441	Ţ	775		76L	1.4	14977
WITHOUT PRI POPULATION	PRIMARY 200 to			6089	79	28720	14	4701	1	**	114	40230	37	16077	15	4282	6	2937	61	1_
g	LOWER Below	200 	1	2009	14	2118	ო	444	2	58	35	4629 ,	9	935	32	4070	33	2608	7.1	7613
HABITAT T+ ems)))	ſς	1)NO.	ii)Pop.	i)No.	ii)Pop.	i)No.	ii)Popl	I .	ii)Pop.	i)No.	ii)Pop。	, ONC	ii)Pop.	j)No.	ii)Pop.	1)NO.	ii)Pop.	ON	ii)Pop.
Total Er+jm2+od	population (Dec-31,	1973)	57 738	000	105,370	•	57.273	, , , , , , , , , , , , , , , , , , ,	30.005		247,086		77-386	2006	85 A11	† † •	A0 909	/7/60	7000	203,720
Total	habita- tions	ሎ	00.1	777	204		96)	77	-	506)	106	2	178	O H	137) H		421
Taluka	-	7		rernem	Bandez	3	Bi fodo i a	חדר דסווסד ח	5 + a + a 5	7 7000	Sub-Total	For North Zone	· · · · · · · · · · · · · · · · · · ·	T T R M G C T	7	Fonda		Sangueiii	Sub-Total	torCentral Zone
Sr.	• 0 2			-	0	J	Ċ	2		r	വ		4	5	1		C	0	6	

Table XVIII

-2-

†			-				r		r			
/3	44.81		59.43		30,60	70.70	22,63		47,75		1 00	0,000
12	9,505		76.214		14,153)	6.874		106,746		010 100	27.5.707
11	67.19		71.95		49.28		33,33		61,87		7. J.	04 01.
0)	43		277		89		29		417		700	77.1
6	1	1	ı	1	1	ı	1	1	ı	ı		ı
ò	2	1,722	13	13,386	4	3,590	2	1,500	21	20,198		45,057
2	17	5,482	121	44,619	21	6,925	12	3,394	171		376	123,946
9	1	2,301	143	18,209	43	3,638	15	1,980	225	26,128	223	38,370
5	i)No.	ii)Pop.	i)No.	ii)Pop.	i)No.	ii)Pop.	i)No.	ii)Pop。	i)No.	ii)Pop.	oN(ii)Pop.
£	21,212		128,569		43,388		30,373	•	223,542		674 354	† •
8	64		385		138		87		674		- :a1	†))
7	10 Mormugao		Salcete		Quepem		Canacona		Sub-Total	for South Zone	Grand Total	Goa
	10		T		12		13		14		15	700 William

*Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

Table XIX: Talukawise Habitations with and without a Lower Secondary School/ Section in Rural Areas of Goa as on September 30, 1976*

SE	Taluka	Total No.	No. of	f Habitations with	Ø	Lower Seco	Secondary/School,	1001/
		tions	Within	n the	Atal	Distance of	A 6 25 5	1 1
			No.	ation %	1	% 	No.	than 5 kms
-	Pernem	129	10	7.75	06	69.77	29	22.49
0	Bardez	204	34	16.67	166	81.37	4	1.96
ო	Bicholim	96	വ	. 5.21	77	80.21	14	14.58
4	Satari	7.7	2	2.52	91	20.86	59	76.62
Ω.	Sub-Total for North Zone	506	51	10.08	349	68.61	901	21.31
9	Tiswadi	106	1.7	16.15	68	83,85	ı	1
7	Ponda	178	23	12.92	147	82.58	α	4,50
ω	Sanguem	137	70	7.23	51	37.30	9/	55,47
0	Sub-Total for Central Zone	421	50	11.88	287	68.17	84	19,96
10	Mormugao	64	4	6.25	59	92.19	T	1.56
T	Salcete	385	28	7.27	345	89,61	12	3.12
12	Quepem	138	4	2.90	35	61.59	49	35.51
13	Canacona	87	ω	9.20	47	52.02	32	36.78
14	Sub-Total for South Zone	674	44	6.52	536	79.53	94	13.95
15	Grand Total for all Goa	1601	145	90.6	1172	73.20	284	17.74
	solutions assessed by the same terminal discount or a columnative de insurabilities of extensions and the same of					· · · · · · · · · · · · · · · · · · ·		

* Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu.

TABLE XX

Talukawise Villages without Secondary School Facilities in Goa as on September 30, 1976 arranged in Population Slabs according to the Meeds of Lower Secondary School Level*

ı •	Taluka	Total	' Total	Vill	lages wit	without Lower	r Secondary	ry School		Facilities			
		No.of Villa-	Estimated Population	Items	OA F		SIABS	or od b	TIA	VILLAGES	POPU	POPULATION	
	κ.	ର ଓ ଓ ୧	(Dec. 31, 1973)	ξΩ	2100 2100	4999	10,000	10,000	0/	Total:	7.7		
	00 m	ά	54.438	i. No.	9	10	1	1	<i>م</i>	50.00	18,057	33.17	
-2	mon to a	2		ii. Pop.	998,6	8,191	1			•	depublic a	despisation and the second sec	· j
,	Rerdes.	Z 0	105.370	i. No.	~	9	1		_	23.33	17,679	16.78	
*		3		ii. Pop.	1,444	16,235		•	Complete Space and Price of the		*	emplomateur de la la de des especiale de d	1,
	Biobolin	. 4	57.073	1	rc	7	~	i	-	68.75	31,932	55.75	
		2		ii. Pop.	7,772	16,392	7,768			- :	-		
		· -	30.005	1. No.	8		1	3	σ	81.82	23,497	78.31	
		•		ii. Pop.	3,472	20,025			•		,	de la company de	L.
Par Proces	Sub-Total		_	Č.	77	7	~		36	48.00	91,165	36.90	
diam'r.	Zone	75	247,086	ii. Pop.	22,554	60,843	7,768	1				arms of 1 amps and 4	
	์ เการพลดำ	18	77,386	1	4	8	1	1	9	33.33	13,962	18.04	
		i		ii. Pop.	7,649	6,313	1	1		and the second property of the second	and the second s		T
_!	Ponda	19	85.411			2	1	1	W	15.79	8,218	9.62	
	3)		ii. Fop.	2,040	6,178	1 :	1			annum organ server water - as		<u> </u>
;	Sanonem	-	40.929	j. No.	ı	2	ŧ	t	0	18.18	4,839	11.82	
-					î	4,839		1			•		
			 .	- Tanana sa		•		-			Consider the Assessment Section of the Constitution of the Constit	2	

13	13.26	11.69	22.37	71.65	26.86	31.53	27.98
7)	22.92 27,019	20.00 2,479	37.93 28,762	78.57 31,087	37.50 8,157	46.43 70,485	40.78 188,669
0)	- 1			= ;	ι 	56	73
من ن	1	1 1	1 1 .		1 1		1 1
₩	1 1 :	1	1 1	10,854	3	10,854	18,622
7	6 47,530	2,479	21,998	12,111	6,295	142,883	41,056
	689.6	1 1	6,764	8,122	1,862	16,748	29 48,991
	i. No.	i. No.	i. No.	i. No.	i. No.	i. No.	i. No. ii. Pop.
э [,]	203,726	21,212	128,569	45,388	30,373	223,542	674,354
m	48	rv	53	4	ω	56	179
٦,	Sub-Total for Central Zone	10 Mormugao	Salcete	medeno	13 Canacona	Sub-Total for South Zone	fo
	o,	100	7		-23	4	70

* Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu.

TALUKAWISE VILLAGES WITH AND WITHOUT A .
HIGHER SECONDARY SCHOOL/SECTION IN RURAL
AREAS OF GOA AS ON SEPTEMBER 30, 1976*

Sr. No.	Taluka	Total Villa- ges	No.of Habi- tations	Total Esti- mated Rural Popu- lation (Dec.31, 1973)	Village: Secondar No. of Villa- ages.	s with a H ry School/ 'No.of Habita- tions.	Higher 'Section 'Average Population per School/ Section.
1	Pernem	18	129	54 , 438		***	-
2	Bardez	30	204	105,370	-	-	***
3	Bicholim	16	96	57,273	_	- -	****
4	Satari	11	77	30,005			-
5	Sub-Total for North Zone	7 5	506	247,086		-	•
6	Tiswadi	18	106	77,386	_		
7	Ponda	19	178	85,411	***	***	-
.8	Sanguem	11	137	40,929	1	1	40,929
9	Sub-Total for Central Zone	. 48	421	203,726	1	1	203,726
10	Mormugao	5	64	21,212		***	
11	Salcete	29	385	128,569	1	1	128,569
12	Quepem	14	138	43,388			enim E
13	Canacona	, 8	87	30,373			
,14	Sub-Total for South Zone	56	674	223,542	1	1	223,542
15	Grand Total for all Goa		1601	674,354	2	2 :	337,177

^{*}Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu.

TABLE XXII

Talukawise Villages without Secondary School Facilities in Goa as on September 30, 1976 Arranged in Population **Slabs** from 5000 upwards according to the needs of Higher Secondary School Level*

7	Talilka	Total No.	Total		ages without	Higher	Secondary	S	1 Facilities	it ies	
NON NO	, ,		Estimated	Items		ation Sl	ps	2	O	na	ation
· 		Villages	Population		I	10,000 to Al	Above	No.	% to	Total	%
-	7		(Dec,31,173)	72	6666	15,000	15,000	8	Total	11	7/
,	Pernem	18	54,438	i, No.	m	1	ı	'n	16,67	19,476	35.78
1			**************************************	ii. Population	19,476		1				
~	Bardez	30	105,370	i,No.	5	1	1	5	16.67	32,888	31,21
J				ii.Population	32,888	***					
m	Bicholim	16	57,273	i, No.	4	***	***************************************	4	25,00	27,531	48,07
				ii. Population	27,531	ı	ı				
4	Satari		30,005	i.No.	9-6	***************************************	1	1	*	1	-
				ii.Population	-		Yeare	1	1		
ī,	Sub-Total	75	247.086	i.No.	12	1		12	16.00	79,895	32,33
)	for North			ii.Population	79,895	*	ı				
9	Tiswadi	- 8	77.386	. No.	The state of the s			7	38.89	46,912	65.71
)				ii. Population	46,912	•	ı	,			
7	Ponda	19	85,411	i.No.	9	_	1		36,84	47,961	56.15
)	l		ii. Population	36,909	11,052	ŧ				
α	Sanguem	11	40,929	i.No.	2	1	ŧ	2	18,18	11,159	27.26
)				ii.Population	11,159		l				
σ	Sub-Total	for 48	203,726	i.No.	15	ī		16	33,33	106,032	53.62
\	Central Zone			ii.Population	94,980	11,052	1				
								1			

contd.,2

TABLE XXII

-2

									T					-	-
	1			14,372		1	1	1		-	1	14,372	2	25,424	
	7,178		8			က	17,149	3	1	1,101	15		42	271,635	
i) No.	ii) Pop.		i)No.	ii) Pop.		- [ii) Pop.	i) No.			i) No.	ii) Pop.	i) No.	ii) P6p.	
21,212			128,569								223,542		179 674,354	-	
വ			29			14		00	-		56			m O	
Mormugao			Salcete		;	Quepem		Canacona			Sub-Total	for South Zone	Grand Tote	tor all G	
10			디			12		33			14		15		
	Mormugao 5 21,212 i) No. 1	Mormugao 5 21,212 i) No. 1 ii) Pop. 7,178	Mormugao 5 21,212 i) No. 1 ii) Pop. 7,178	O Mormugao 5 21,212 i) No. 1 ii) Pop. 7,178 Salcete 29 128,569 i)No. 8	O Mormugao 5 21,212 i) No. 1 ii) Pop. 7,178 Salcete 29 128,569 i) No. 8 ii) Pop. 55,326 14,37	Mormugao 5 21,212 i) No. 1 ii) Pop. 7,178 Salcete 29 128,569 i) No. 8 ii) Pop. 55,326 14,37	O Mormugao 5 21,212 i) No. 1 ii) Pop. 7,178 Salcete 29 128,569 i) No. 8 Ouepem 14 43,388 i) No. 3	Mormugao 5 21,212 i) No. 1 ii) Pop. 7,178 Salcete 29 128,569 i) No. 8 Quepem 14 43,388 i) No. 3 ii) Pop. 17,149	Mormugao 5 21,212 i) No. 1 Salcete 29 128,569 i) No. 8 Quepem 14 43,388 i) No. 3 Canacona 8 30,373 i) No. 3	Mormugao 5 21,212 i) No. 1 Salcete 29 128,569 i) No. 8 Quepem 14 43,388 i) No. 3 Canacona 8 30,373 i) No. 3	Mormugao 5 21,212 i) No. 1 Salcete 29 128,569 i) No. 8 Quepem 14 43,388 i) No. 3 Canacona 8 30,373 i) No. 3 Li) Pop. 17,149 Li) Pop. 17,149	D Mormugao 5 21,212 i) No. 1 Salcete 29 128,569 i) No. 8 Quepem 14 43,388 i) No. 3 Canacona 8 30,373 i) No. 3 Sub-Total 56 223,542 i) No. 15	Darmugao 5 21,212 i) No. 1 Salcete 29 128,569 i) No. 8 Quepem 14 43,388 i) No. 3 Canacona 8 30,373 i) No. 3 Sub-Total 56 223,542 i) No. 15 For South 10 Pop. 96,760 14,37 Ini) Pop. 96,760 14,37	Salcete 29 128,569 i) No. 8 Quepem 14 43,388 i) No. 3 Canacona 8 30,373 i) No. 3 Sub-Total 56 223,542 i) No. 15 Grand Total 179 674,354 i) No. 42	Salcete 29 128,569 i) No. 1 Quepem 14 43,388 i) No. 3 Canacona 8 30,373 i) No. 15,107 Sub-Total 56 223,542 i) No. 42 Grand Total 179 674,354 ii) Pop. 271,635 25,42 for solth for all Goa

* Source of Data: Planning of Statistical Sect Education, Goa, Daman and Di

ABLE XXII

-2-

***	7	'n	4	Ωĺ	9	7	రం	6	, ,
10	-Mormugao	2	21,212	i) No.	7	***	1	Ţ	20.00
				ii) Pop.	7,178			+	
	Salcete	29	128,569	*0N(t ,			1	6	31,03
,				ii) Pop.	55,32	14,372			
12	Quepem	14	43,388	, i No.	က	1	1	ო	21.43
٥				.dod (ii	17,149	•	ı		: 2
13	Canacona	ω	30,373	i) No.	E °	1	ı		37.50
				ii) Pop.	17,107	-			
14	Sub-Total	56	223,542	i) No.	15	_		16	28.57
	for South			ii) Pop, 96,760 14,372	96,760	14,372	1		
15	Grand Total		179 674,354	i) No.	42	2	ı	44	24.02
	tor all G	т О		ii) P6p.	POp.271,635	25,424	l		
-	, , , , , , , , , , , , , , , , , , , ,	1				1			,

* Source of Data: Planning of Statistical Section, Directorate of Education, Goa, Daman and Diu.

1/2

TABLE XXIII

Talukawise Distributionof Night School Facilities in Goa according to different Stages and Management as on September 30, 1976*

									1															1.	13	}		
Total No. of	schools				1	2	2	1		1	•		-	1	2	2	Ţ	0	2		1	ı		****	1		2	Cl
	E.			1	1	1	1	,	l	1	ı	ı	Ţ	ı	ť	1	ı	ı	1	i	1	1	1	1	1	1	1	ı
And the second second	1.S+F-15		1		,	1		1	1	1	į	I	1	I	ı	1	1	1	1		1	ı		ı	ı	i	1	1
t Schools	+LS+HS	•				-	1	1	ì		1	***************************************	ı	1	1	1	1	ı	1	ı	-	ı	ı	1	I	1	Į.	ł
of Nigh	LS UP+LS UF	ı		ı	ı	-	4			I	ı	ı		1	-	-	ı	2	2	-	1	**	1	i	1	!	2	2
No	SI P	1	ı	1	ı	7	T	ı	1	!	1	1		,		-	1	ı	ł	į	ı	-	ı	ı	ı	1	1	1
	UP	1	1	ı	1	+	Ŧ	I	1	1	1	i	1	,	,1	4.	,	ı	1	-	1		Ī	æ	1	1	1	ı
Items	· 6	i. Govt.	ii. Non-Govt	iii. Total	i. Govt.	ii. Non-Govt.	iii. Total	i. Govt		iii. Total		ì.	iii. Total	Ι.		iii. Total	i. Govt.		iii. Total	i, Govt,	<i>Z</i> .	iii. Total	i. Govt.		iii. Total	j.	11.	1,1,
Taluka	ń	Parnem			Bardez			Bicholim		•	Satari		1	Sub-Tatal	for North	Zone	Tiswadi			Ponda			Sanguem			Sub-Total	for Central	Zone
Sr.No.	_	-	4		N			m)		4			ľ			9)		7	-		α)		6		

Table XXIII(contd.)

4	4					-					
		2 3	ဇ		4	ය	9	7	æ	6	10
		!	!		1	1	1	1	ı	1	1
		1 %	_	Vt	ı	ı	1	,	í	ı	1
		iii) Total	!		1	1	ı	1	-1	1	
		_	_		ı	1	1	ŧ	1	1	1
		ii) Non-Govt.	<u> </u>	نې	1	'	-1	,	•	1	
					1	1	괵	,	•		7
		_	_		ı	1	1	ı	1	ı	ı
		11)	_	•	ı	1	Т	1	ı	1	
		iii) Total			1	1	-	ı	ļ	ı	
		13 Canacona i) Govt.			ı	ı	1	1	1	ĵ	1
		11)		•	ı	ı	1	1	1	1	•
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	_	_		1	1	1	1	1	1	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.ਜ 	_		1	ı	1	į	J	ı	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ii)	_	•	1	1	2	1	ı	1	2
111	1 1 1	Zone iii) Total			ł	1	2	•	1	1	2
1 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-	-		1	ı	1	1	1	ı	1
1 1 1 10	1 2 - 1	11)	_	•	1	-1	ഹ	1	1	1	9
		iii) Total.			1		D D	1	ı	1	9

* Source of Data : Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu

TABLE XXIV

Talukawise Distribution of Lower Primary Schools α ccording to Enrolment Size in Goa as on September 30, 1976*

Sr. No.	Taluka	Items	No. of Lo	of Lower Primary Their percentage	iry Schools ige to Total	s with Enrolment al	rolment	Total No. of Schools
-	7	ი	Below 20 ¢	20 to 100s	101 to 159	160 to 200	201 and above	
-	Pernem	, I. No.	ı	51	14	4		7.1
		ii. %	1	71,83	19.72	5,63	2.82	100
N	Bardez	1 – 1	1	39	24	4	17	α r
		ii. %	1,18	45.88	28.24	4.70	20.00	100
ຸຕ	Bicholim		2	50	0	က	2	7.1
		11. %	2.82	70.42	12.68	4.23	9.85	100
4	Satari	i. No.	24	61	ന	ı	1	00 00
		ii. %	27.27	69.32	3,41	1		100
വ	Sub-Total for	i. No.	27	201	50	, — -	26	315
	North Zone	ii. %	8.57	63 . 81	15.87	3,50	8.25	100
9	Tiswadi	i. No.		24	13	J.	14	7.7
		ii. %	1.75	42.10	22,81	8.78	24.56	100
7	Ponda	i. No.	ſΩ	96	61	6	6	138
		ii. %	3.62	69.57	13.77	6.52	6.52	100
œ	Sanguem	i. No.	25	68	4	1	-	66
		ìi. %	25.25	69.89	4.04	1,10]	1.01	0
6	Sub-Total for	i. No.	31	188	36	15	24	294
	Central Zone	ii. %	10.54	63.95	12.24	5.10	8,18	100

(6)

i i i i i i i i i i i i i i i i i i i	ao i. No. 1 17 4 - 4 15.38 - 15.38. e ii. No. 3 66 22 11 12 12 ii. No. 3 45 19.30 9.65 10.53 iii. % 4.62 69.23 18.46 6.15 1.54 ha ii. No. 3 44 7 1 1.82 - 1.54 total ii. % 3.85 66.15 17.31 6.15 6.54 Total ii. % 7.83 64.56 15.07 4.83 7.71			લ	 	ان • •	9	۵	S	2	Ť
i. No. 3.86 65.38 15.38 - 4 i. No. 3.86 65.38 15.38 - 4 ii. % 2.63 66 22 11 12 ii. % 3.65 45 12 4 1 ii. % 4.62 69.23 18.46 6.15 1.54 ii. % 5.45 80.00 12.73 1.82 - ii. % 5.45 80.00 12.73 1.82 - ii. % 3.85 66.15 17.31 6.15 6.54 tal ii. % 7.83 64.56 15.07 4.83 7.71	i. No. 1 17 4 - 4 ii. % 3.86 65.38 15.38 - 4 ii. % 2.63 66 22 11 12 ii. % 2.63 57.89 19.30 9.65 10.53 ii. % 4.62 69.23 18.46 6.15 1.54 ii. No. 3 44 7 1 - ii. % 5.45 80.00 12.73 1.82 - ne ii. % 3.85 66.15 17.31 6.15 6.54 tal ii. % 7.83 64.56 15.07 4.83 7.71		7								
ii. % 3.86 65.38 15.38 - 15.38 ii. % 2.63 66 22 11 12 ii. % 2.63 57.69 19.30 9.65 10.53 ii. % 4.62 69.23 124 4 1.54 ii. % 5.45 80.00 12.73 1.82 - ii. % 5.45 80.00 12.73 1.6 17 ne ii. % 3.85 66.15 17.31 6.15 6.54 coa ii. % 7.83 64.56 15.07 4.83 7.71	ii. % 3.86 65.38 15.38 - 15.38 ii. % 2.63 66 22 11 12 ii. % 2.63 57.69 19.30 9.65 10.53 ii. % 4.62 69.23 12.4 4 1.54 ii. No. 3 44 7 1 - ii. % 5.45 80.00 12.73 1.82 - ii. % 5.45 80.00 12.73 1.82 - ral ii. % 3.85 66.15 17.31 6.15 6.54 doa ii. % 7.83 64.56 15.07 4.83 7.71	:		•:		17	4	1	7	26	-1
i. No. 3 66 22 11 12 ii. % 2.63 57.89 19.30 9.65 10.53 ii. % 4.62 69.23 124 4 1 a ii. No. 3 44 7 1 - al for ii. No. 10 172 45 16 17 one ii. No. 68 56.15 17.31 6.15 6.54 otal ii. No. 68 561 15.07 4.83 7.71	i. No. 3 66 22 11 12 ii. % 2.63 57.89 19.30 9.65 10.53 ii. % 4.62 69.23 18.46 6.15 1.54 a i. No. 3 44 7 1 - al for ii. No. 10 172 45 16 17 one ii. No. 68 56.15 17.31 6.15 6.15 otal ii. No. 68 561 131 42 67 Goa ii. % 7.83 64.56 15.07 4.83 7.71	MO	rmugao	ii. %	3.86	65,38	15,38	Area	15,38	100	1
ii. % 2.63 57.89 19.30 9.65 10.53 ii. % 3 45 12 4 1 a i. No. 3 44 7 1 - ii. % 5.45 80.00 12.73 1.82 - one ii. No. 10 172 45 16 17 otal ii. % 3.85 66.15 17.31 6.15 6.54 otal ii. % 7.83 561 15.07 4.83 7.71	i. No. 3 45 12 4 1 i. No. 3 45 12 4 1 al for i. No. 3 44 7 1 - al for ii. % 10 172 45 16 17 one ii. No. 68 561 17.31 6.15 6.54 otal ii. No. 68 561 17.31 6.15 6.54 otal ii. No. 68 561 17.31 42 67 Goa ii. % 7.83 64.56 15.07 4.83 7.71	,		••	٣	99	22	11	12	114	
i. No. 3 45 12 4 1 1 1 54 1 4 1 1 1 54 4 4 69.23 18.46 6.15 1.54 1 1 54 1 1 1 1 2 1 1 1 1 1 1 2 1 1 1 1 2 1 1 2 2 4 2 1 2 <td>i. No. 3 45 12 4 1 na ii. % 3 44 7 1 - tal for i. No. 10 172 45 16 17 Total i. No. 68 561 131 42 67 Total ii. % 7.83 64.56 15.07 4.83 7.71</td> <td>ď.</td> <td>Icete</td> <td>ii. %</td> <td>2.63</td> <td>57.89</td> <td>19,30</td> <td>9.65</td> <td>10.53</td> <td>100</td> <td></td>	i. No. 3 45 12 4 1 na ii. % 3 44 7 1 - tal for i. No. 10 172 45 16 17 Total i. No. 68 561 131 42 67 Total ii. % 7.83 64.56 15.07 4.83 7.71	ď.	Icete	ii. %	2.63	57.89	19,30	9.65	10.53	100	
tal for i. No. 3 44 7 1 - tal for i. No. 10 172 45 16 17 Total i. No. 68 561 1131 42 67 I Goa ii. No. 68 561 131 42 67 I Goa ii. No. 68 561 15.07 4.83 7.71	tal for i. No. 10 17 14 7 1 - tal for ii. % 5.45 80.00 12.73 1.82 - Total 10 172 45 16 17 Total ii. No. 68 561 17.31 6.15 6.54 Total ii. No. 68 561 131 42 67 I Goa ii. % 7.83 64.56 15.07 4.83 7.71			• NI	ď	45	12	4		65	
i. No. 3 44 7 1 - ii. % 5.45 80.00 12.73 1.82 - i. No. 10 172 45 16 17 ii. No. 68 56.15 17.31 6.15 6.54 ii. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	i. No. 3 44 7 1 - ii. % 5.45 80.00 12.73 1.82 - i. No. 10 172 45 16 17 ii. No. 68 561 17.31 6.15 6.54 ii. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	ð	ıe pem	11. %	4.62	69.23	18.46	6.15	1.54	100	
ii. % 5.45 80.00 12.73 1.82 - i. No. 10 172 45 16 17 ii. % 3.85 66.15 17.31 6.15 6.54 i. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	ii. % 5.45 80.00 12.73 1.82 - i. No. 10 172 45 16 17 ii. % 3.85 66.15 17.31 6.15 6.54 i. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	,	deliberation makes a version makes deliberation deliberation deliberation makes deliberation makes deliberation makes deliberation deli	• (12	ď	44	7	1	-	55	
i. No. 10 172 45 16 17 ii. % 3.85 66.15 17.31 6.15 6.54 i. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	i. No. 10 172 45 16 17 ii. % 3.85 66.15 17.31 6.15 6.54 i. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	ပိ	nacona	% . ; ;	5.45	80,00	12.73	1.82	***	100	
i. No. 68 561 17.31 6.15 6.15 i. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	i. % 3.85 66.15 17.31 6.15 6.15 i. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71		**			179	45	16	17	260	1
i. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	i. No. 68 561 131 42 67 ii. % 7.83 64.56 15.07 4.83 7.71	വ് വ്	bb-lotal for outh Zone	11. %	3,85	66.15	17.31	6.15	6.54	100	T
ii. % 7.83 64.56 15.07 4.83 7.71	ii. % 7.83 64.56 15.07 4.83 7.71			-	ay	561	131	42	67	869	T
		Q 4	end lotal or All Goa	13. %	7.83	64.56	15.07	4.83	7.71	8	

* Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu.

TABLE XXV

Talukawise Distribution of Upper Primary Schools according to Enrolment Size in Goa as θ^{A} September 30, 1976*

	. 2	'n	٠٠	2	¥	٨	Ċ	Ç	
	ŀ)		Q		
10	Mormugao	i. No.	I	-1	ı		ſ.	1	
		ii. %	1	14.28	ı	14,28	71.44	100	
-	Salcete	i. Nò.	2	9	m	1		1	
		ii. %	18,18	54.54	27.28	-		100	
12	Que pem .	i. No.	3	m	I	1	-	V	
		ii. %	20,00	50.00		1	***	100	
13	Canacona	i. No.	വ	7	2			0	
		ii. %	55,54	11.12	22.22	11.12	-	100	
14	Sub-Total for	i. No.	10		J.	2	5	33	
	South Zone	ii. %	30,30	33,33	15,15	6.07	15.15	100	•
15	Grand Total	i. No.	20	50	17	0	10	106	
	for all Goa	ii. %	18.86	47.18	16.04	8,49	9.43	100	

				,		· 6			

* Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman, Diu.

TABLE XXVI

Talukawise distribution of Lower Secondary Schools according to Enrolment Size in Goa as on September 30, 1976*

Sr. No.	Taluka	Items	No.of Lo and Thei	No. of Lower Secondary and Their Percentage	Secondary Schools with Enrolment srcentage to Total	ls with E	ırolment	Total No.
_	~	V	Below 100 ₄	100 to 239 s	240 to 360 &	361 to 450 >	451 and above s	
Н	Pernem	i No.	1 60	5 . 7	4 00			13
2	Bardez	i. No.	() ()		30.70	κο٠/ α	15,38	, 100
		ii. %	6,38	12,77	14.89	17.02	48.94	100
ന	Bicholim	i. No.	-	2	3	1	4	6
		11.%	1	22.22	33,34	-	44.44	100
4	Satari	- / 1	2		2		-	L.
,		ii. %	40.00	20,00	40.00	1	- The second sec	100
വ	Sub-Total for	i. No.	9	14	16	6	29	74
	North Zone	ii. %	8.11	18.92	21.62	12.16	39.19	100
9	Tiswadi				1	က	16	33
		11. %	1	21.21	21,21	60.6	48.49	100
7	Ponda		2	8	9	4	ιΩ	25
		ii. %	8,00	32.00	24.00	16.00	20.00	100
ω	Sanguem	i. No.	1	9	4		2	
		ii. %	1	50.00	23,33	1	16.67	1001
6	Sub-Total for	i. No.	2	21	17	7	23	. 02
	central cone	11. %	2.86	30.00	24.28	10.00	32.86	100

(.....2)

\neg					-			-		- T		
5	13	001	50 .	100	7	100	6	100	79	100	223	100
35	ထ	61.55	27	54.00	7	57.14	2	22,22	41	51,90	93	41.70
۵	m	23.07	10	20.00		14.29	{	11.11	15	18.98	31	13,90
9	\$===	7.69	9	12.00	-	1		11.11	6	10.14	4]	18,39
. 2 :		7.69	7	14,00	0	28.57	2	55.56	15	18.98	50	22.42
٠٠					pres	1	I	0 1 - 10	-	1	œ	3.59
M	02	ii. %	i. No.	ii. %	·r	11. %	NO	ii. %	. No.	11.%	j. No.	.11. %
٨	Occument		م+مر [مي م+مر)) 1		י מתפי אפווו		Callacolla	Sub-Intal for	South Zone	Canad Total for	All Goa
	<u></u>) H	-	- 1	,	77	-	?	7.	† -1	14	<u> </u>

* Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu.

TABLE XXVII

. > 1

Talukawise distribution of Higher Secondary Schools/Sections according to Enrolment size in Goa as on September 30, 1976*

Sr	Sr.No. Taluka	aluka	Items	No. of Highe	er Secondary Sc	Secondary Schools/College	Total Number
		`		tage to Total	ıtn Enrolment & al	their Percen	of Schools/ College
				Below 100	100 to 500	501 and	Sections
1		7	6	5	Ь	above g	٨
	-						
-	<u> </u>	Pernem	i. No.		I	-	, -
			ii. %	100.00		The state of the s	100
2	Bè	Bardez	i. No.	ŧ	2		C
			ii. %	ı	100.00		100
ო	Bj	Bicholim _	i. No.	1	-		
			ii. %			100,00	100
4	Sa	Satari	i. No.	1	ı	-	
			ii. %	-	J		
വ	Su	Sub-Total for	بستو	Т	2		V
	NC	orth Zone	ii. %	25,00	50,00	25.00	100
9	•r-f	Tiswadi	i. No.	ı	2	,	
			• 1	-	66.67	33,33	100
7	Po	Ponda	i. No.	1	1		
			ii. %	1		100,00	100
∞	S B	Sanguem	i. No.	1	1		
-	1		• ;	_	1	100,00	100
					The state of the s		

• [-	1	72	~ ~	Lr.
Central Zone ii. %	1	40.00	00*09	100
11. %	1	100.00	a a constant of the constant o	100
i. No.	l l	3 100,00	1 1	3
i. No.	1 1	1 1		1 1
i. No.	100.00	1 1		100
Sub-Total for i. No. South Zone ii. %	1, 20,00	4 80 . 00	1 1	5 100
i. No.	2 14.29	8 57 . 14	4 28 . 57	14

*Source of Data : Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

TABLE XXVIII

Talukawise distribution of Lower Primary Schools $\dot{\alpha}$ ccording to the Number of Teachers Employed in Goa as $\dot{\alpha}$ h September 30, 1976*

Sr.	Taluka	Items	No. of St	chools with	Schools with Percentage	and Teachers	Total No.
•		•	Below	4 to 5	6 to 8	Above 8	7
~	7	શ	4	5.	و	4	عد
							and the second s
-	Pernem	1, NO.	60 87 50	9 01	2 89		71
		0/ • ТТ	00.4	T-1-1-0	70.	eren en e	DOT .
2	Bardez	4	45	20	15	5	85
		ii. %	52.94	23.54	17.64	5,88	100
ო	Bicholim	i. No.	57	9	9.	2	71
,		ii. %	80.26	8.46	8.46	2.82	100
4	Satari	i. No.	98	2	•		88
		ii. %	97.73	2.27	-		100
Ŋ	Sub-Total for	i, No.	248	37	23	7	315
	North Zone	ii. %	78,73	11.75	7,30	2,22	0010
9	Tiswadi	i. No.	28	14	വ	10	57
		ii. %	49.10	24.56	8.78	17.56	100
7	Ponda	i. No.	110	19	7	2	138
· 	i	ii. %	79.71	13.77	4.57	1,95	100
82	Sanguem	i. No.	95	2		***	66
		ii. %	96*36	2.02	2.02		100
6	Sub-Total for	t	233	35	14	12	2 7 762
·	Central Zone	ii. %	79.25	11.90	4.76	4.09	3 001
	en e	Tring the Property of the Prince of the Prin				,	

(2)

- 1					_								_
8	26	100	114	TOOT	65	100	55	100	260	100	869	100	and encountries and an east state and
2	1		J.	4.39	1				ı.C.	1.93	24	2.77	
9	7	26.90	10	8.77	4	6.15	1	-	10	8.08	58	29.9	
. 2	3	7.72	1	21.06	7	10.77	α	14.55	7.1	15.78	113	13.00	-
3		65.38	75	65.78	54	83.08	77	85.45		74.21	674	77.56	
ر د		ii. %	. No.	11. %	NO.	11. %	•12	11.%		1. NO.	ON	.i. %	
r		Mormugao	0,100+0	, , , , ,		To e beili		Canacona		Sub-Total for		for all Goa	
-		10	1.1	-i -i		7		e 1		14		ΩΤ	

* Source of Data: Planning and Statistical Section, Directorate of Education, Boa, Daman and Diu.

TABLE XXIX

TALUKAWISE DISTRIBUTION OF SINGLE TEACHER LOWER PRIMARY SCHOOLS IN GOA WITH ENROLMENT AS ON SEPTEMBER 30,1976*

Sr. No.	Taluka	Total No.of		ngle th en			r Prima	ery Sch	pols
		Lower Primary Schools	Bel- ow	to 20	21 to	31 to 40	Á b ove 40	Total	%
1	Pernem	71	_	_	-	•••			
2	Bardez	85	_	1	,		_		1.18
3	Bicholim	71	_	3			-	3	4.23
4	Satari	88	5	16	11	4	1	37	42.05
5	Sub-Total for North Zone	315	5	20	11	4	1	41	13.02
6	Tiswadi	57	1	_	2		_	3	5.26
7	Ponda	138	-	4	9	-	-	13	9,42
8	Sanguem ,	99	1	27	11	3	-	42	42,42
9	Sub-Total for Central Zone.	294	2	31	22	3		58	19.73
10	Mormugao	26	-	1	1	1	-	3	11.54
11	Salcete	114	_	3	1	1	-	5	4.39
12	Quepem	65		3	2	1	-	6	9.23
13	Canacona	55		3	2	2	-	7	12.73
Ψ4	Sub-Total for South Zone	260	-	10	6	5		21	8.08
15	Grand Total for all Goa	869	7	61	39	12	1	120	13.81
	Percentage to Total	-	5.83	50.83	32.50	10.00	0.84	100.00	

^{*}Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

TABLE - XXX

Talukawise distribution of Upper Primary Schools according to the Number of Teachers Employed in Goa as on September 30, 1976*

				i I			7							Т	-		Ţ	1		}		
	Total No. of schools	21	100	15	100	14	100	6	1.00	59	100	o	100	L.O.	ū	100	=	-	#	100	7	100
teachers employed	Above 12	ı	ARADA ANTARARA REPORTE DE LA CARLO DEL CARLO DE LA CARLO DEL CARLO DE LA CARLO DEL LA CARLO DE LA CARL	2	13,33		7.14		11,12	4	6.77	C	70 00	22,24	1		1	1	2	14,28	5	71.44
percentage & teac	9 to 12	m	14.29	7	46.67	m	21.42	treet	1	13	22,04		1	1	l	•	1	1	•	-		14.28
with	7 to 8	ω	38.10		1	D.	35.72	3	33,34	16	27.12	r	0.00	33.34	က	00.09	1	ı	, 9	42.86	1	1
No.of schools	Below 7	10	47.61	9	40.0	2	35.72	5	55.54	26	44.07		+>	44.42	2	40.00	1	ſ	9	42.86		14,28
Items	8	. cN	11. %	i. No.	ii. %	oN .			11. %		ii. %	1	I. NO.			ii. %		ii. %		<u> •</u> -		11. %
Taluka	2 4	Ретпеш		Bardez	100	Bicholim	: : : :	Satari	1	Sub-total	for North Zone		11SWad1		Ponda		Sanguem)	Sub-Total	for Central Zone	Mormingan))))
Sr.	No.		1	Ç	7	ď)	4		r.			0				∞		6		10)

121	
(contd. Table XXX)	

T	 				,					
, 39		100	9	100	6	100	33	100	106	100
7	1		•	1 .		11.12	9	18,18	12	11,31
Q	2	18,18		16.67	1	1	4	12,12	17	16.04
	7	18.18	H	16.67	4	44.44	7	21.22	29	27,35
e.	7	63.64	4	99•99	4	44,44	76	48,48	48	45,30
И	i. No.	ii. %	ĭ, No.	ii. %	ž. No.	ii. %	i. No.	ii. %	i, No.	ii. %
•	Salcete		Quepem	- The second sec	Canacona		Sub-total	for South Zone	Grand Total	for All Goa ii. %
	 TT		12		13		14		15	

*Source of Data : Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

TABLE XXXI

Talukawise distribution of Lower Secondary Schools according to the Yumber of Teachers Employed in Goa as Oth September 30, 1976*

	n										12
Total No.	\$ 500 E	13	47	9	5	74	33 100	25 100	12	70	2)
e and	Above 30	-	3 6.38	22.22	1 1	5 6.76	4 12.12	ī	1 1	5.71	• • •)
Percentag	21 to 30	2 15.38	8	1 1	I I	10	9 27.27	3 12,00	1 8.34	13 18.57	
No. of Schools with Percentage Teachers Employed	10 to 20	8 61.56	29	777.78	3 60.00	47	17 51.52	18	8 66.66	43 61.43	
No. of Sch Teachers E	Below 10	3 23.06	7	1 1	2 40.00	12 16.22	9.09	4	3 25.00	10	
Items	v	ii.%	i. No.	i. No.	i. %	i. No.	i. No.	i. No. ii. %	i. No.	i. No.	
Taluka	7	Pernem	Bardez	Bicholim	Satari	Sub-Total for North Zone	Tiswadi	Ponda	Sanguem	Sub-Total for Central Zone	
Sr.		-1	2	m	4	D.	9		ω	0	+

۵.	1	100	5 50	10,00	1	14.29	6	100	6 79	7,59 100	15 223	6,73 100
9	6	69.24	15	30.00	4	57.13	r{	11.11	29	36.72	52	23•32
TABLE XXXI	· m	23.07	29	58,00	,	14.29	J.	55.56	38	48.10	128	57.40
TABL	-	7.69		2.00		14.29	m	33,33	9	7.59	28	12.55
m	i. No.	ii. %	i. No.	ii. %	i. No.	11. %	i. No.	ii. %	i. No.	ii. %	i. No.	ii. %
7	Mormuaao	2	Salcete		Quepem		Canacona			South Zone	Grand Total	for All Goa
	0	l	11		12		13		4		15	

| * Source of Data: Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

..

}

TABLE XXXII: Talukawise Fopulation and distribution of School Facilities by Stage and Level in Goa as on Sept. 30, 1976*

(1971) No. of tions. 52,905 91 124,103 128,389 88 32,515 97 267,913 398	e estat syntrigen er degen degen degen degen de gen degen degen degen degen degen degen degen degen degen dege	No. of Sci	School Sections a	and Average	Population	and burnish grant of the state		
		Primary Stage.	ge.		Secor	Secondary Stage.	•	
	Lower		level Level		Lower Level		Higher Level	-
H	of Sectors.	Average persons per sec.	No. of Sections.	Average Fersons per sec.	No. of Sections.	Average Fersons per sec.	No. of Sec- tions.	Average Fersons per sec.
			PERNEW TALUKA	The state of the s				
		581	83	1603	H 3	4070	H	52906
, co	7	2. I	BARDEE TALUKA 59	2103	47	2670	1	62051
, π		m	BIOCHOLIM TALUKA	\$1				
, m	8	664	24	2433	10	5839	H	58389
	7	335	SATARI TALUKA 12	2710	5	6503		•
	8	673	AL FOR	NOATH ZONE 2093	75	3572	4	66978
105,809		1306	TISWADI TALUKA 42	2519	34	3112	က	35270
84,590	10	 	FONDA TALUKA 31	2729	26	3253	1	84590
44,588	5-11	429	SANGUEM TALUKA 13	3430	13	3430	H	44588

Ç

Population		No.	of School	Sections a	and Average Po	Population	a artikulari da	
(1971)		Primary St	Stage	*	Sec	Secondary St	Stage	
,	Lower Level		Upeer Level		Lowe <i>r</i> Level		Higher Level	ı e
	Mo. of Sections.	Average persons per sec.	No. of Sec- tions.	Average Fersons Fer sec.	Mo. of Sec- tions.	Average Persons per sec.	No. of Sections.	Average Persons per sec.
			9. SUB-TOT	AL FOR	CENTRAL ZONE			
234,987	331	710	86	2732	73	3219	ហ	46997
			10. MORMU	MORMUGAO TALUKA	₩.			The cold department of the first of proceedings of the cold first
65,511	42	1560	20	3276	m H	5039		65511
			11. SALCETE	TALUKA				
155,676	159	979	61	2552	50	3114	೮	51892
			12, QUBPEM	M TALUKA				
41,547	73	569	13	3196	7	5935	*	9
			13. CANACON.	ONA TALUKA	¥.			
29,486	67	440	18	1638	σ	3276	 1	29486
			14. SUB-T	SUB-TOTAL FOR	SOUTH ZONE			
292,220	341	857	112	2609	79	3699	ĸ	58444
			15. GRAND	O TOTAL FOR	R ALL COA			
795,120	1070	743	326	2439	227	3503	14	56794
		A				ļ-		I STATE OF THE PROPERTY OF THE

* Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu.

TABLE XXXIII

TEACHERS FOR ALL STAGES OF SCHOOL EDUCATION IN GOA ACCORDING TO THEIR QUALIFICATIONS AS ON SEPTEMBER 30,1976*

1	i gydrinidd in edd rhagen agenegan rown rodd ac Ad-Magenniaghn feliniaeth bag ar gen gwyr ar yn ae I		School	Education	1	
Sr. No.	Qualifications	<u>Primar</u> Lower Level	ry Stage Upper Level	Secondar Lower Level	ry Sta g e 'Higher , Level	Total for all stages.
1.	Post-gradu s tes	1	21	218	, 116	356
2.	Graduates	. 124	571	1331	T make	2026
3.	Under-graduates upto S.S.C. or Matriculation level	3226	1295	371		4892
4.	Below S.S.C. and Others (with Portuguese or Other qualifica- tions)	349	5		-	354
5.	Total	3700	1892	1920	116	7628
6.	Percentage to Total	48.51	24.80	25.17	1.52	100.00

^{*} Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

TABLE XXXIV

NUMBER AND DERCENTAGES OF SCHOOL TEACHERS IN GOA BY QUALIFICATIONS AND STAGE OFOR THE YEAR 1965-66 AND 1976-77*

		Acade-	School	stage and	Teachers		Total for All	. All
Sr.	Qualifications	mic	Primary	Teacher	Secondary	ry Tearhers	Sedes	
		Year	No.	%	No.	%	No.	%
1.	Post-graduates	99-5961	1	t	38	2,32	38	0,95
		1976-77	22	0,39	334	16.41	356	4.67
2.	Graduates	1965-66	1	1	490	29 89	490	12,25
		1976-77	695	12.43	1331	65,37	2026	26,56
რ	Under-graduates	1965-66	1221	51.71	983	59,98	2204	58.10
	upto S.S.C. or Matriculation level	1976-77	4521	80,85	371	18.22	4892	64.13
4.	Below S.S.C.and	1965-66	1140	48.29	128	7.81	1268	31.70
	Portuguese and such other; qual-	1976-77	354	6.33	1	ŧ	354	4.64
		99-5961	2361	100,00	1639	100.00	4000	100.00
	T	1976–77	5592	100.00	2036	100,00	7628	100,00

* Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

TABLE XXXV

TEACHERS ACCORDING TO SCHOOL STAGE AND LEVEL, SER AND PUPIL ENROLMENT IN GOA AS ON SEPT. 30, 1976*

Sr.	School stage and level		Teachers	ers	enerator generalisation de la company de	The second secon	Pur	Pupil enrolment		Teacher
No.		Total	Sex a	erc	entage		Total	Sex		Punil Refie
			Males	%	Females	84		Boys	Girls	oraby triba
H	Lower Primary	3700	1684	45.51	2016	54,49	108,716	59,354	49,362	1:29
7	Upper Primary	1892 (24.30)	976	51.59	916	48,41	52,532	30,213	22,319	1 : 28
m	Lower Secondary	1920 (25.17)	1218	63,44	702	36, 56	30,413	17,602	12,811	60 60
4	Higher Secondary	116 (1.52)	79	68.10	37	31.90	3,696	2,222	1,474	1:32
	TOTAL	7628	3957	51.87	3671	48.13	195,357	109,391	85,966	1:26

*Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

TABLE XXXVI

TEACHERS ACCORDING TO SCHOOL STAGE, RURAL/URBAN AREAS, MANAGEMENT AND TRAINING IN GOA AS NÃ SEPTEMBER 30,1976. *

Sr	Area	Items	Teachers	1	in Primary Schools	lools			Teachers i	in Second	Secondary Schools	ST
• 0 2	minument vide		Total	Trained	%	Untrained	%	Total	Trained	%	Untra- ined	%
		Govt.	2813	2307	82,36	506	17.64	130	26	74.62	33	25,38
-	Rural	Non-Govt.	1582	737	46.59	845	53,41	1237	884	71,46	353	28.54
***************************************		Total	4395	3044	69.26	1351	30.74	1367	981	71,76	386	28.24
		Govt,	490	403	82,24	. 48	17.76	85	72	84.71	13	15,29
. 0	Urban	Non-Govt.	707	412	58.27	295	41.73	584	467	79,97	117	20.03
·		Tota1	1197	815	68.09	382	31.91	699	539	80.57	130	19,43
		Govt.	(3303)	2710	82.05	593	17,95	(10,55	169	78.60	46	21.40
m [*]	Grand Total for	Non-Govt.	(2289 (40.93)	1149	50.20	1140	49.80	1821 (89,44)	1351	74.19	470	25,81
	All Goa.	[otal]	5592 (100,00)	3859	10°09	1733	30.99	2036	1520	74.66	516	25.34

*Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

TEACHERS ACCORDING TO SCHOOL STAGE AND LEVEL, SEX AND PROFESSIONAL TRAINING IN GOA AS DN SEPTEMBER 30, 1976 *

- []		53	21	49	50	54	41	33	14	56	06		06	60	8	13
Period annual Company of the Company	%	49.53	67.21	54,49	49.50	46.54	48.41	37,83	33.14	36.56	31.90	ı	31.90	46.09	53.00	48.13
ers Percentage	FeMales	1319	697	2016	592	324	916	531	171	702	37	ı	37	2479 (67.53)	1192 (32.47)	3671
l each(and		50.47	32.79	45.51	50.50	53.46	51.59	62.18	98.99	65.44	68,10	Î	68,10	53.91	47.00	51.87
Sex	Males	1344	340	1684	604	372	926	873	345	1218	79	-	79	2900 (73.28)	1057 (26.72)	3957
Iotal	and the second s	2663	1037	3700	1196	969	1892	1404	516	1920	116	1	116	5370 (70.52)	2249 (27,48)	76.08
Items		Trained	Untrained	Total	Trained	Untrained	Total	Trained	Untrained	Total	Trained	Untrained	Total	Trained (Percentage)	Untrained (Percentage)	7 77 41
Stage and Level	1	,	Lower Primary	The state of the s		Upper Primary			Lower Secondary	Together article of	the security and described described described to the security of the security	Higher Secondary		l Stages and Levels		
Sre	No.			†-		5			ຕໍ			4		A11		

*Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

TABLE XXXVIII

TEACHER TRAINING INSTITUTIONS IN GOA ACCORIX NG TO LEVEL OF TRAINING, MEDIUM OF INSTRUCTION, TYPE OF COLLEGE AND COURSES/OFFERED AS ON SEPTEMBER 30,1976*

3	1000	Wedina	asa [[o]]	0.50	Professio	nal Course	of fened	Average
No.	rever or Teacher Training	nedrum of Instruction	Туре	Total No.	Diploma	Degree/ Duration Total No. Diploma of Seats Course Available	Total No. of Seats Available	Yearly output
	Secondary	English	Co-Edu. private	-	Degree	One year	100	100
8	Primary	English	Co-Edu. Private	~ i	Diploma	One year	40	39
_ ო_	Primary	English	Co-Edu. Private	2	Diploma	Two year	160	156
4	Primary	English	Co-Edu. Govt.	T	Diploma	Two year	100	88

* Planning and Statistical Section, Directorate of Education, Goa, Daman & Diu.

Table XXXIX: Academic Staff of Teacher Training Colleges in Goa according to Qualifications and Sex as on September 30, 1976*

Sr. No.	Qualifications.	Primar Train Total	cy Tes ing Le		Second Train:	lary T ing le	eacher
1.	Doctorate level	-			2	1	1
2.	Masters	10	7	3	11	4	7
3.	Graduate	8	7	1	2	2	-
4.	Untrained-gra- duate upto S.S.C Level.	7	7	-	_		-
	Total	25	21	4	15	7	8

^{*} Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu.

. .

Table XL: Number and Category of Respondents of Questionnaire regarding In-service Training Needs of School Teachers in Goa.

Sr. No.	Respondents of Questionnaire Category.	No.
1.	Officers from the Directorate of Education for Goa, Daman and Diu.	4
2.	Zonal Officers for Educational Administration of Goa.	2
3.	Members of the Inspectorate Staff of School Education in Goa.	7
4.	Principals of Teacher Training Colleges in Goa	3
5.	Teacher Educators from Teacher Training Colleges in Goa.	6
6.	Headmasters and Headmistresses of Schools in Goa	8
7.	School Supervisors and Senior Instructors in Goa	3
8.	School Teachers and Assistant Teachers in Goa	17
3	Total No. of Respondents.	50

Table: XLI: Respondents for Questionnaire on In-service Training Needs of School Teachers in Goa, grouped according to Qualifications and Sex

Sr. No.	Respondents for Qu	estionna Needs.		In-service	Training
	Category	Male	Female	Total	% of Total
1.	Post-graduates	19	7	26	52,00
2.	Graduates	14	2	16	32.00
3.	Undergraduates	4	4	8	16.00
	Total No. of Respondents.	37	13	50	100.00

Table XLII : Respondents for Questionnaire on Inservice
Training Needs of School Teachers in Goa
and Their Teaching Experience

Sr. No.	Respondents' Teaching Experience Category.	Total No. of years.	Average No. of years.
1.	At Primary School level	77	1.54
2.	At Secondary School level	495.5	9.91
3.	At Primary Teacher Training College	61.5	1.23
4.	At Secondary Teacher Training College	20.0	0.40
5.	At other Arts and Science Colleges	8.5	0.17
	Total at all levels	662.5	13.25

Table XLIII: Respondents for Questionnaire on In-service Training Needs of School Teachers in Goa and Their Administrative Experience.

Sr. No.	Respondents' Administrative Service Category.	Total No. of years.	Average No. of Years.
1.	In School Administration	156	3.12
2.	In School Inspection and Supervision	52	1.04
3.	In College Administration	18.5	0.37
4.	In Education Department	37.5	0.75
5.	In Extension Services and other departments.	5.0	0.10
	Total Administrative Service	269	5.38

TABLE XLIV

REASONS FOR AND AGAINST THE NEED FOR AN INTENSIVE IN-SERVICE TRAINING PROGRAMME FOR SCHOOL TEACHERS IN GOA.

Sr. No.	Questio- nnaire Item No.	Total No. of Respon- dents.	Affir- mative Respon- ses	%	Nega- tive Respon- ses.		Blank Resp- onses	%
1.	8	50	43	86.0	7	14.0	Nil	
2.	9(i)	7	6	85.71	1	14.29	_	_
3.	(ii)	7	2	28.58	5	71.42		-
4.	(iii)	7	1	14.29	6	85.71	-	 -
.5.	(iv)	7	1	14.29	6	85.71	-	_
6.	(v)	7	5	71.42	2	28.58	_	-
7.	(vi)	7			7	100.0	-	
8.	(vii)	7	4	57.16	3	42.84	-	
9.	(viii)	7	1	14.29	6	85.71	-	_
10.	(ix)	7		-	7	100.0	-	-
41.	(x)	7	1	14.29	6	85.7	-	
12.	10(i)	43	32	74.41	10	23.27	1	2.32
13.	(ii)	43	24	55.79	15	34.91	4	9.30
14.	(iii)	43	31	72.09	9	20.96	3	6.95
15.	(iv)	43	20	46.52	19	44.18	4 .	9.30
16.	(v)	43	20	46.52	18	41.83	5	11.65
17.	(vi)	43	27	62.77	9	20.93	7	16.30
18.	(vii)	43	33	76.72	7 _	16.31	3	6 . 9 7
19.	(Viii)	43	39	90.71	3	6.96	1	2.33
20.	(ix)a	43	39	90,71	1	2.33	3	6.96
21.	(ix)b	43	41	95.34	1	2.33	1	2.33
,22.	(ix)c	43	40	93.03	2	4.64	1	2.33
23.	(ix)d	43	40	93.03	1	2.33	2	4.64
24.	(x)	. 43	39	90.71	4	9.29		
25.	(xi)	43	32	74.41	10	23.27	1	2.32
26.	(xii)	43	28	65.10	11	25.60	4	7.30
27.	(xiii)	43	31	72.09	9	20.95	3	6.96

TABLE XLV.

INTENSIVE IN-SERVICE TRAINING NEED FOR SCHOOL TEACHERS IN GOA AND THE AREAS OF PRIORITY.

Sr.	Question-	Total	Respondents First	response:	s Third	Fourth
No.	wise Item No.	No. of respondents.	Priority respond-ents.	Priority respond-ents.	priority respondents.	Priority Respon- demts
1	11(i)	43	5	7	8	<u>23</u> (53.49%
2	11(ii)	43	7	11	14 (32.56%) 11
3	11(iii)	43	23 (53.49%)	7	11	2
4	11(iv)	43	8 (18 41.86%)	10	7
	TOTAL:		43	43	43	43

TABLE XLVI

INTENSIVE IN-SERVICE TRÂINING PROGRAMME FOR SCHOOL TEACHERS IN GOA AND THE NEED FOR A SEPARATE ARRANGEMENT TO ORGANISE AND CONDUCT THE PROGRAMME

C_	Question-		Respondents! responses.									
Sr. No.	wise item	Total no.of respon- dents.	Affir- mative respon- ses.	%	Negative responses	%	Blank resp- onses	%				
1	12(i)	43	4	9,30	27	62.81	12	27.89				
2	12(ii)	43	18	41.82	17	39.55	8	18.63				
3	12(iii)	43	8	18.63	26	60.41	9	20.96				
4	12(iv)	43	10	23.28	23	53.44	10	23.28				
5	12(v)	43	24	55.76	8	18.62	11	25.62				
6	12(vi)	43	25	58.12	13	30.25	5	11.63				
7	12(vii)	43	29	67.42	9	20.95	5	11.63				
8	12(viii)	43	18	41.82	14	32.56	11	25.62				
9	12(ix)	43	20	46.47	14	32.56	9	20.97				
10	12(x)	43	24	55.76	11	25.62	8	18.62				

TABLE XLVII

GENERAL CONDITIONS AND PRACTICAL DIFFICULTIES INVOLVED IN ORGANISING THE INTENSIVE IN-SERVICE TRAINING PROGRAMME FOR SCHOOL TEACHERS IN GCA.

Sr. No.	Question- wise Item No.	Total no.of Respon- dents	Affir- mative respon- ses	. %	Nega- tive resp n- nses		Blank respon- ses	, , ,
11	13(i)	43	42	97.67		-	1	2. 33
12	13(ii)	43	32	74.42	7	16.29	4	9.29
,'3	13(iii)	43	33	76.74	8	18.62	2	4.64
4	13(iv)	43	37	86.08	3	6.96	3	6.96
5	13(v)	43	38	88.40	3	6.96	, 2	4.64
6	13(vi)	43	41	95.34	1	2.33	1	2.33
7	13(vii)	43	38	88.40	2	4.64	3	6.96
[8	13(viii)	43	39	90.72	1	2.33	3	6.97
9	13(ix)	43	39	90.72	2	4.64	2	4.64
10	,14(i)a	43	. 19	44.19	; 7	16.29	. 17	39.53
11	14(i)b	43	11	25.58	: 15	34.89	17	39.53
12	14(i)c	43	4	9.31	. 17	39.53	22	51.16
13	14(i)d	43	9	20.94	16	37.21	18	41.85
14	14(ii)	43	: 37	86.08	3	6.96	3	6.96
15	14(iii)	43	36	83.76	5	11.60		4.64
16	14(iv)	43	27	62.81	12	27.88	4	9.31
17	14(v)	43	32	74.46	5	11.60	6	13.94
18	14(vi)	43	35	81.39	4	9.30	4	9.31

Table XLVIII

Number and category of respondents interviewed in connection with the Inspection and Supervision of Schools in Goa.

Sr.	Inspection and supervision of Schools in Goa	No.
No.	Category of Respondents.	
1.	Officers from the Directorate of Education for Goa, Daman and Diu.	2
2.	Officers from the State Institute of Education for Goa, Daman and Diu.	1
3.	Zonal Officers for Educational Administration in Goa.	2
4.	Inspectors of Schools for Goa.	2
5.	Deputy Inspectors of Schools for Goa.	4
6.	Subject Inspectors for Schools in Goa.	4
7.	Assistant District Inspectors of Schools for Goa.	5
8.	Headmasters and Headminstresses of Schools in Goa.	6
9.	Supervisors and Senior Instructors in Schools in Goa.	2
10.	Members of Management Board of Non-Government Schools.	2
11.	School Teachers and Assistant Teachers in Goa.	15
	Total No. of Respondents	45

Table XLIX

Respondents interviewed in connection with the Inspection and Supervision of Schools in Goa grouped according to qualifications.

Sr. No.	Inspection and Supervision of Schools in Goa										
NO.	Qualifications of Respondents	Total No. interviewed.	%								
1.	Post-graduates	21	46.67								
Ż.	Graduates	18	40.00								
3.	Under-graduates	6	13.33								
	Total No.of Respondents	45	100.00								

TABLE L :

TALUKAWISE DISTRIBULION OF INSPECTING OFFICERS FOR PRIMARY STAGE OF SCHOOL EDUCATION ACCORDING TO THENUMBER OF SCHOOLS/SECTIONS, TEACHERS AND PUPIL ENROLMENT AS ON SEPTEMBER 30, 1976 *

		Average No. per Officer.	5,605	13,627	6,193	2,585	7,002	11,039	9,075	3,285	7,800	5,794	16,296	4,199	2,927	7,304	7,330
1000	Enrolment.		11,210	27,254	12,385	5,179	56,019	22,078 1	18,151	6,570	46,799	11,587	32,591	8,398	5,854	58,430	161,248
	Ξ	Tota. No.er		2.	<u>-</u> i		Ω	0	•		4		<u></u>			ro	16
Education	Teachers	Average per Officer	204	477	206	116	250	362	306	135	267	193	523	155	123	248	254
School E	ω	No.	407	954	411	231	2003	723	611	270	1604	385	1045	310	245	1985	5592
Jo		Average per Officer	62	16	56	55	99	62	89	59	70	31	110	43	43	57	64
Primary	School/S	° ON	124	181	. 112	109	526	123	177	117	417	62	220	98	85	453	1396
	,	Total	2	Ω	7	2	α	2	7	2	9	2	7	2	2	8	22
	ctina	Officers Acad. Admin.	-	႕	-	႕	4		-	-	9	T	Н	-	-1	4	1.1
No. of	Inspe	Offic Acad.	-1		H	- -	4	T	Н	-1	က	H	-	-	Н	4	1.1
	Tallika		Pernem	Bardez	Bicholim	Satari	Sub-Total for North Zone.	Tiswadi	Ponda	Sanguem	Sub-Total for Central Zone	Mormugao	Salcete	Quepem	Canacona	Sub-Total for South Zone	Grand total fo
	57.	. o	-	7	ო	4	ស	9	7	ω	6	10	H	12	۳ ا	14	15

Education, Goa, Daman andDiu. * Planning and Statistical Unit, Directorate of

180

TABLE - LI

ZONAL DISTRIBUTION OF INSPECTING OFFICERS FOR SECONDARY STAGE OF SCHOOL EDUCATION ACCORDING TO THE NUMBER OF SCHOOLS/SECTIONS, TEACHERS AND PUPIL ENROLMENT AS ON SEPTEMBER 30, 1976*

Secondary Stage of School Educatio	Students Enro	Total enrolled			10,487	10,605	12,964	34,056	y design in the second second property with early upon a party with the second
ary Stage of	Teachers	**************************************	Average per Officer		318	315	385	339	
Second	Te	<u> </u>	• 041		989	630	770	2036	
,)1s/	Sections	Average per Officer		9	39	42	40	
	Schools/	Se	ģ		79	78	84	241	-
scting		Acad. Adm. Total	1		Ø	7	2	9	
Inspe	ers	Adm.			4	-	-	က	
No. of	Office	Acad.		The second se	H	٦	7	9	
To+al No.	of Talukas		,		4	ო	4	17	
19.00	Zone of Talukas		, ,		North	Central	South	All Goa	•
	H. C.	• •	,		-	2	n	4	

* Planning and Statistical Section, Directorate of Education, Goa, Daman and Diu



4.5 Analysis of Data

General Information Relevant to the Study

i) Area, Population and Administrative Divisions

According to the Census of India - 1971, Goa, with an area of 3701.0 km.sq., has a total population of 795,120 inhabitants, distributed in 11 towns and 383 revenue villages of the 11 talukas as mentioned earlier in Chapter II and indicated in Tables I and II.

ii) Rural Population, Panchayat Villages and Habitations

The rural population of Goa amounting to 591,877 inhabitants, resides in 1601 habitations spread out in 179 panchayat villages of the 11 talukas of Goa as shown in Table IX.

Bardez Taluka with 30, has the highest number of panchayat villages whereas Mormugao with only 5 has the lowest. Similarly Salcete Taluka with 383, has the highest number of habitations whereas Mormugao with only 64, has the lowest with a population of 21,446 inhabitants.

As there is a wide difference in the population of various habitations it provides an overall average for Goa of about 370 persons per habitation with Bicholim Taluka having the highest average of 519 persons and Salcete Taluka, the lowest of 278 persons per habitation.

iii) Zones of Educational Administration

As already mentioned in Chapter II and clearly illustrated in Figure 7, the entire area of Goa has been trifurcated into three zones of educational administration:

(a) The one at the northern side consisting of four talukas namely Pernem, Bardez, Bicholim and Satari, is called the North Educational Zone. (b) The one lying in the centre and consisting of three talukas namely Tiswadi, Ponda and Sanguem, is called the Central Educational Zone, and (c) The one in the southern side consisting of four talukas namely Mormugao, Salcete, Quepem and Canacona, is called the South Educational Zone.

The North Educational Zone with 75, has the highest number of panchayat villages and a rural population of 233,510 inhabitants. It is followed by the South Educational Zone with 56 panchayat villages and a rural population of 195,302 inhabitants and the Central Educational Zone with 48 panchayat villages and a rural population of 163,065 inhabitants, as noted in Table IX.

iv) Rural Population and Habitations arranged in Population Slabs

The entire rural population of Goa grouped in various population slabs indicates that out of the total of 1601 rural habitations of Goa, 71.21 percent have a population

of less than 500 whereas the population of the remaining 461 habitations ranges between 500 to 5000.

Salcete Taluka which has the highest number (385) of habitations also has the highest number in the population range under 500 as well as in the range between 500 to 5000, as indicated in Table X.

v) Urban Population, Townships and Educational Zones

The urban population of Goa, which according to the Census of India - 1971 accounts to 203,243 inhabitants, is spread over 11 urban habitations in the 11 talukas of Goa, as can be noticed in Table XI.

The population of these habitations also varies a great deal, with the higest of 59,258 inhabitants in the city of Panjim in Tiswadi Taluka, to the lowest of 1335 inhabitants in Chauri township of Canacona Taluka and provides an overall average for Goa of 18,477 inhabitants per urban habitation which is higher than most of the urban habitations except the four townships of Panjim, Mapusa, Margao and Vasco.

Accounting the urban population of the Educational zones separately, the population of 96,918 inhabitants in the South Educational Zone far exceeds that of 71,922 inhabitants in the Central Educational Zone and that of 34,403 inhabitants in the North Educational Zone.

The zonal figure for urban population when added to the figure for rural population, the South Educational Zone scores the higest, with a population of 292,220 inhabitants, followed by the North Educational Zone with 267,913 inhabitants and the Central Educational Zone with 234,987 inhabitants. Obviously the majority of the people of Goa appear to reside in the South Educational Zone followed by the North Educational Zone. Hence, it seems logical to assume that the South Educational Zone would have the lion's share of all the school educational facilities in Goa, followed by the North Educational Zone and thereafter by the Central Educational Zone. However, this does not happen to be the case, as can be seen in Table XII.

vi) Recognized Schools by Stage and Management

As on September 30, 1976 there were in all 1212 recognized schools in Goa out of which, the lowest number of 377 schools, representing 31.11 per cent of the total, are in the South Educational Zone whereas the North Educational Zone has 452 schools, the highest number, representing 37.29 percent of the total.

Stagewise too the South Educational Zone has the least number of primary schools representing only 30 per cent of the total whereas the North Educational Zone has 38.36 per cent and the Central Educational Zone has 31.59 per cent.

In the case of secondary schools however, the case is slightly different for the South Educational Zone has 35.44 percent of the total whereas the North Educational Zone has 32.91 percent and the Central Educational Zone 31.65 percent of the total. The ratio of upper primary schools to lower primary schools is the best in North Educational Zone with 1:5 followed by South Educational Zone with 1:8 and trailing behind with 1:21 is the Central Educational Zone. The overall ratio for All-Goa is 1:8 which apparently is much higher than 1:3 recommended by the Education Commission of 1964-66. The ratio of higher secondary schools to lower secondary schools is 144 in Central Educational Zone, 1:16 in South Educational Zone and 1:19 in North Educational Zone and the comparative figure for All-Goa is 1:16 which is four times higher than 1:4 recommended by the Education Commission of 1964-66.

All the recognized schools in Goa are either managed by Government or by private agencies. The Municipal Councils or other Local Government bodies like the Panchayat Raj, etc. are not at all concerned with the administration of either primary or secondary schools in Goa. Out of the total number of 1212 recognized institutions in Goa, 957 representing 78.96 per cent are managed by Government whereas only 225 representing 21.04 percent

are managed by non-Government private agencies, as indicated in Table XIII.

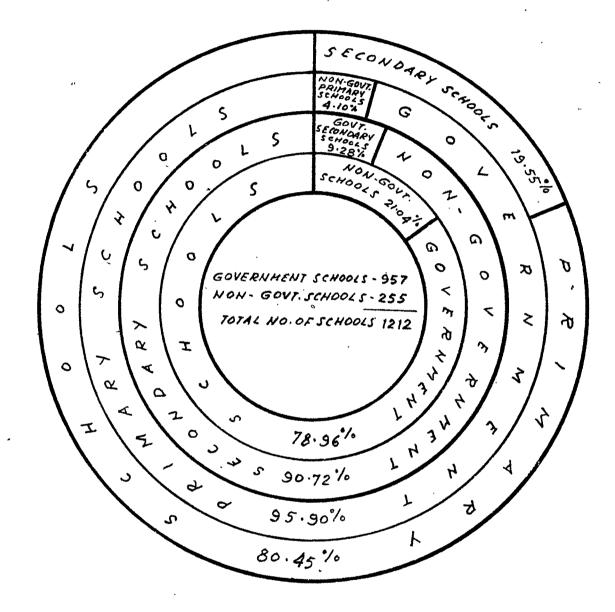
Stagewise there are 975 primary schools in Goa representing 80.45 percent of the total number of 1212 schools and only 237 are secondary schools representing 19.55 percent of the total. Out of these, 935 primary schools representing 95.90 per cent, are managed by Government and only 4.10 percent by private agencies. In the case of secondary schools only 9.28 percent of the total are managed by Government whereas 90.72 percent are in the hands of private agencies, as illustrated in Figure 9.

In rural areas too there are 885 schools, representing 83.18 percent of the total of 1064, under Government management, whereas only 179, representing 16.82 percent are in the hands of private agencies. However, out of the small number of 179, 83.80 percent are secondary schools, as shown in Table XIV.

In the case of urban areas the schools appear to be evenly distributed. Out of the total of 148 schools in urban areas of Goa, 72 are managed by Government and 68 by private agencies. It should, however, be observed that even here, the majority of the primary schools, representing 84.00 percent of the total of 65, are Government managed and only 16.00 percent by private agencies whereas

157

RECOGNIZED SCHOOLS IN GOA BY STAGE AND MANAGEMENT, SEPT-76



in the case of secondary schools the private agencies manage 88.67 percent of the total of 73, leaving only 11.33 in the hands of the Government, as can be verified from Table XV.

2. Factors affecting the Location of Schools

i) Habitations with and without Lower Primary Schools

With reference to universal provision of primary education in rural areas of Goa, the figures published in the State Table for Goa, Daman and Diu, as part of the Third All-India Educational Survey indicated that as on December 31, 1973 805 rural habitations with an estimated population, representing 67.41 percent of the total, had lower primary school facility within their habitation and the number of children who had to walk more than 2 kms, for their school were only 3558.

According: to the present study as on September 30, 1976 there were 860 habitations, representing 53.72 percent of the total number of 1601 habitations, with a lower primary school facility within their habitation, 628, representing 39.23 percent had it in their neighbouring habitation within a distance of 1.5 kms, and only 113 habitations, representing 7.05 percent of the total, had to walk for it more than 1.5 kms, away. However, considering the position on the basis of the educational zones of Goa,

the situtation is rather poor in the South Educational Zone where only 38.13 percent of its total habitations have a lower primary school facility of their own whereas in the case of Central Educational Zone 63.66 percent of the habitation have it and in North Educational Zone the percentage goes even higher to 66.21, as indicated in Table XVI.

ii) Habitations with and Without an Upper Primary School Facility

In the case of upper primary school facilities the information published inthe State Tables for Goa, Daman and Diu as part of the Third-All-India Educational Survey indicated that as on December, 31, 1973, 222 rural habitations with an estimated population, representing 27.62 percent of the total had an upper primary school facility of their own and only 3983 children had to walk more than 3 kms, away for their school. However, the record does not indicate whether all eligible children were enrolled for upper primary school or not for there are many villages in Goa which do not have a single upper primary school although some of them even have more than five lower primary schools.

The present study indicates that as an September 30, 1976 there were only 225 habiations, representing only 14.05 percent, with an upper primary school facility of

their own, whereas 67.65 percent of the habitations had it in their neighbourhood within a range of 3 kms, but 18.30 percent of the habitations had to walk for it for more than 3 kms, away.

Considering the situation on the basis of educational zones of Goa, the North Educational Zone again seems to be in an advantageous position with 19.17 percent of its habitations having an upper primary facility of their own whereas in the case of the Central Educational Zone it is only 14.49 percent and in the case of the South Educational Zone the percentage decends even lower to a mere 9.94 percent of the total number of habitations within the zones. Comparatively, the overall position for All-Goa indicates that 14.05 percent of the total number of rural habitations in Goa have an upper primary school facility within their habitation, as shwon in Table XVII.

(iii) Distribution of Facilities for Primary Education

Considering the distribution of facilities for primary education as a whole it is rather discouraging to note that as at September 30, 1976 there were 722 habitations, with an estimated population of 207,373 inhabitants, representing 30.75 percent of the total, without either a lower or an

upper primary school section within their habitation in spite of the fact that 346 of these habitations had a population of more than 200 inhabitants with an estimated total of 123,946 and as such were in fact eligible for a lower primary school of their own. Besides these, there were 45 other habitations with a population of more than 700 each with an estimated population of 45,057 inhabitants, which were in fact eligible to have an upper primary school facility of their own.

With regard to the educational zones, the South Educational Zone again appears to be the most neglected of the three for presently, there are 417 habitations in it with an estimated population of 106,746 inhabitants, representing 47.75 percent of the total which do not have either a lower or an upper primary school of their own, as may be verified in Table XVIII.

(iv) Habitations with and without A Lower Secondary School Facility

Regarding the provision of lower secondary school:
in rural areas of Goa, the study indicates that as an
September 30, 1976, only 145 habitations, representing 9.06
percent of the total, had a lower secondary school facility
of their own, 73.20 percent had it in their neighbourhood

within the radius of 5 kms, but 17.74 percent had to look for it beyond the 5 kms, range. No doubt, it is true to say, that in the case of secondary schools the nearness of the school itself is not a major factor to be considered, nevertheless, there is certainly a need to have a fair distribution of lower secondary schools in the three educational zones of Goa although this does not appear to be the case. As usual, the South Educational Zone, has the lowest percentage of habitations with lower secondary school facilities in them, compared to 10.08 percent in the North Educational Zone and 11.88 percent in the Central Educational Zone, as pointed out in Table XIX. also be observed that though all the habitations in Tiswadi Taluka have a lower secondary school within the 5 kms.range, in Satari Taluka 76.62 percent of the habitations have to walk for it far beyond the 5 km, range.

(v) Villages without a Lower Secondary School Facility

According to the study, as an September 30, 1976, 73 villages representing 40.78 percent of the total, did not have a lower secondary school facility of their own in spite of the fact of having a population of 188,669 inhabitants representing 27.98 percent of $\frac{\pi_2}{4}$ total. Out of these, three villages were in the population range of 5000 to 10,000 and

41 villages representing 22.91 percent of the total, had a population ranging between 2100 to 5000, as may be observed in Table XX.

Considering the situation in the three educational zones of Goa, the North Education Zone, with a percentage of 48.00 has the highest number of villages without a lower secondary school facility of their own, closely followed by the South Educational Zone with a percentage of 46.43 and then by the Central Educational Zone having the least number, representing 25.00 percent of the total.

(vi) Villages with and without a Higher Secondary School Facility

In respect of higher secondary school facilities, there are in Goa, only two villages, which offer such a facility. One lies in Sanguem Taluka of the Central Educational Zone and the other lies in Salcete Taluka of the South Educational Zone. Since there are only two institutions in rural areas of Goa which provide higher secondary school facility, the average population per school/section is as high as 337,177 inhabitants, as indicated in Table XXI. As on September 30, 1976, 44 villages in the population range of 5000 to 15,000 representing 24.02 percent of the total and involving an

estimated rural population of 44.05 percent of the total, did not have any facility for higher secondary education, as pointed out in Table XXII.

(vii)Distribution of Higher Secondary School Facilities

On the basis of educational zones of Goa, the highest percentage of population without any facility for higher secondary education, is 53.62 in the Central Educational Zone, followed by 49.71 percent in South Educational Zone and the lowest of 32.33 percent in the North Educational Zone, as shown in Table XXII.

Talukawise, such a facility is available in urban areas of eight, of the 11 talukas of Goa. Pernem, Bicholim, Ponda and Canacona have a school each and Mormugao a college section. Besides these Bardez, Salcete and Tiswadi have two college sections each and Tiswadi also has a Central School under Delhi Board of Education. Satari and Quepem are the only two talukas in Goa which do not have any facility at all for higher secondary education even in urban areas, as pointed out earlier in Table XV. Observation should also be made therein, regarding Quepem and Canacona of the South Educational Zone, which are the only two talukas with the lowest number of two schools in urban areas. However, in spite of that fact, the

South Educational Zone appears to have faired better in the distribution of schools in urban areas with a total of 69 as compared to 46 in Central Educational Zone and only 39 in North Educational Zone.

(viii) School Facilities in Urban Habitations:

According to the present study, as oa September, 1976, the urban areas of Goa, had a total of 65 lower primary schools, representing 7.48 percent of the total of 869, ten upper primary schools, representing 9.43 percent of the total of 106, 61 lower secondary schools, representing 27.35 per cent of the total of 223, and 12 higher secondary schools or college sections, representing 85.71 percent of the total of 14. Out of these, the Government manages 84.62 percent of the lower primary schools, 80.00 percent of the upper primary schools but only 9.84 percent of the lower secondary schools and 35 00 % of the higher secondary schools/sections, as can be verified in Table XV. With reference to the distribution of schools in urban areas of the educational zones of Goa it may be observed that the South Educational Zone has the highest number of schools of all types with the exception of the higher secondary which seem to be evenly distributed with 25.001% of the number in each zone.

(ix) Provision for Night School Facilities:

The present study revealed that as on September 30, 1976 there were only six night schools in the whole of Goa all of which are managed by non-government private agencies. Out of these four are located in urban areas and the remaining two in rural areas. Each of the three educational zones of Goa have two each, one in rural area and the other in urban with the exception of the Central Educational Zone which has both the schools located in urban areas, as can be observed in Table XXIII.

3. Suitability of the Present Institutions:

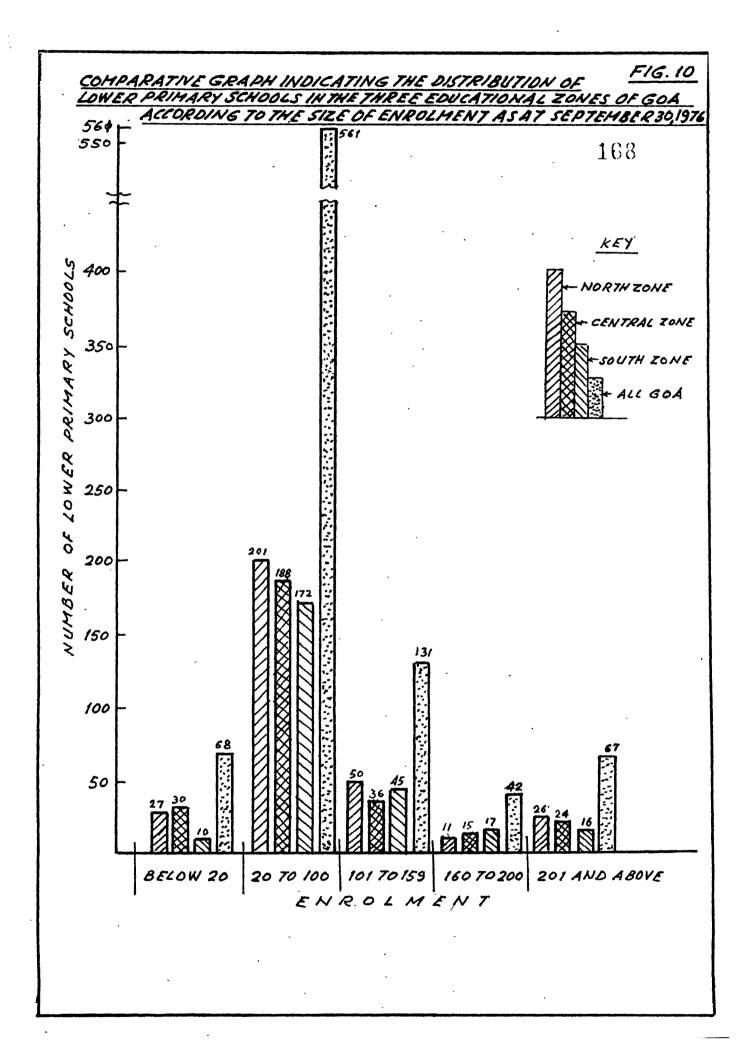
(i) Lower Primary Schools and Enrolment Size:

As indicated in Table XXIV, 72.39 percent of the lower primary schools in Goa, appear to be having an enrolment of less than 100 students and 87.46 percent in fact fall short of the optimum size of 160 to 200 recommended by the Education Commission of 1964-66. All the lower primary schools in Satari Taluka appear to fall short of the recommended standard and so also those in Canacona Taluka with the exception of one school. On the other hand, Tiswadi Taluka with 33.30 percent apparently has the best percentage above the optimum line of enrolment of 160 followed by Bardez Taluka with 24.70

percent and Salcete Taluka with 20.18 percent. It should also be observed that more than 75% of all the schools in every taluka with the exception of Tiswadi, fall far below the recommended mark and therefore are an economic liability. Zonal distribution of lower primary schools by the size of their enrolment is illustrated in Fig.10. It provides a comparative picture of all the three zones indicating together/the overall situation in Goa.

(ii) Upper Primary Schools and Enrolment Size

In the case of upper primary schools the situation is no better. More than 18.86 percent of the total number of schools have an enrolment of less than 100 and only 17.92 percent have 300 and above as recommended by the Education Commission of 1964-66. As a result, 82.08 percent of the schools fall far below the recommended mark and cannot therefore be considered economically viable. In the case of Satari, Ponda, Salcete and Quepem there seems to be no school at all which comes up to the recommended mark of 300 and above. On the whole, more than 80% of the upper primary schools apparently fall below the recommended mark. The best percentage above the recommended mark is that of 85.72 percent in Mormugao Taluka followed



by 33.34 in Tiswadi and 33.32 percent in Bardez Taluka, as indicated in Table XXV. Zonalwise, the Central Educational Zone with 21.42 percent has the highest number of upper primary schools above the recommended line of 300 and above, followed by the South Educational Zone with 21.22 percent and the North Educational Zone holding the lowest number, representing 15.25 percent. A comparative illustration of the situation in the three educational zones and the overall picture for All-Goa is provided in Fig.11.

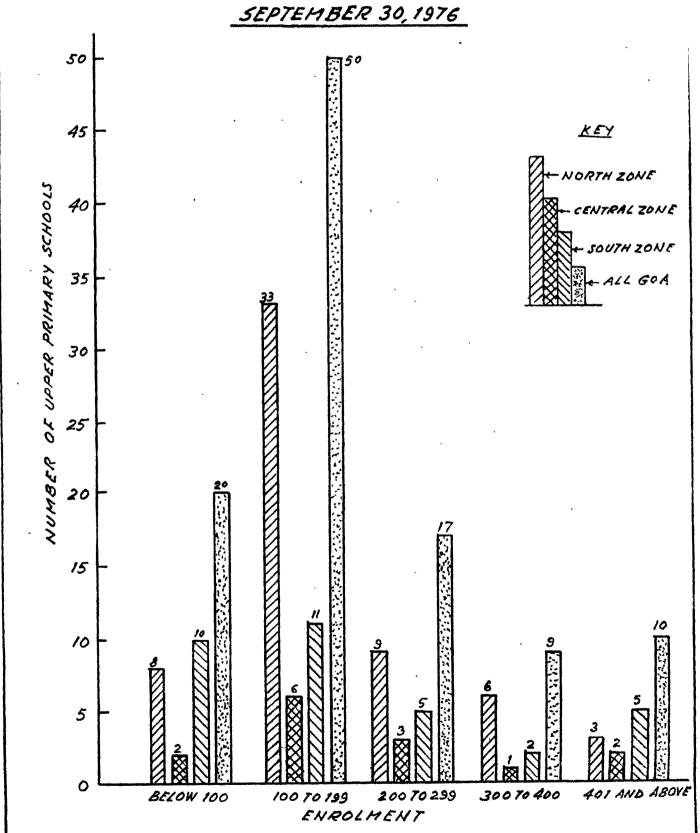
(iii) Lower Secondary Schools and Enrolment Size

In the case of lower secondary schools the situation is even more discouraging to note that there are secondary schools in Goa with an enrolment of less than 100 students although the number is very small but then this number when added to 22.42 percent which represents schools with less than 240 students it makes a difference. However, about 55.61 percent of the lower secondary schools do come upto the optimum size of 360 recommended by the Education Commission of 1964-66 and 18.39 percent are in line with the minimum size of 240, as indicated in Table XXVI.

Zonewise, the South Educational Zone appears to have the highest percentage of 70.89 for lower secondary schools



COMPARATIVE GRAPH INDICATING THE DISTRIBUTION 170
OF UPPER PRIMARY SCHOOLS IN THE THREE EDUCATIONAL
ZONES OF GOA ACCORDING TO SIZE OF ENROLMENT AS AT



with an enrolment, above the line recommended. It is followed by the North Educational Zone with 51.35 percent and the Central Educational Zone with 42.86 at the lowest end. It should also be observed that the South Educational Zone does not have any lower secondary schools with less than 100 students whereas both the other zones do. Talukawise the higher percentage of lower secondary schools above the optimum line of 360 students, is 84.62 percent in Mormugao Taluka followed by 74.00 percent in Salcete Taluka.

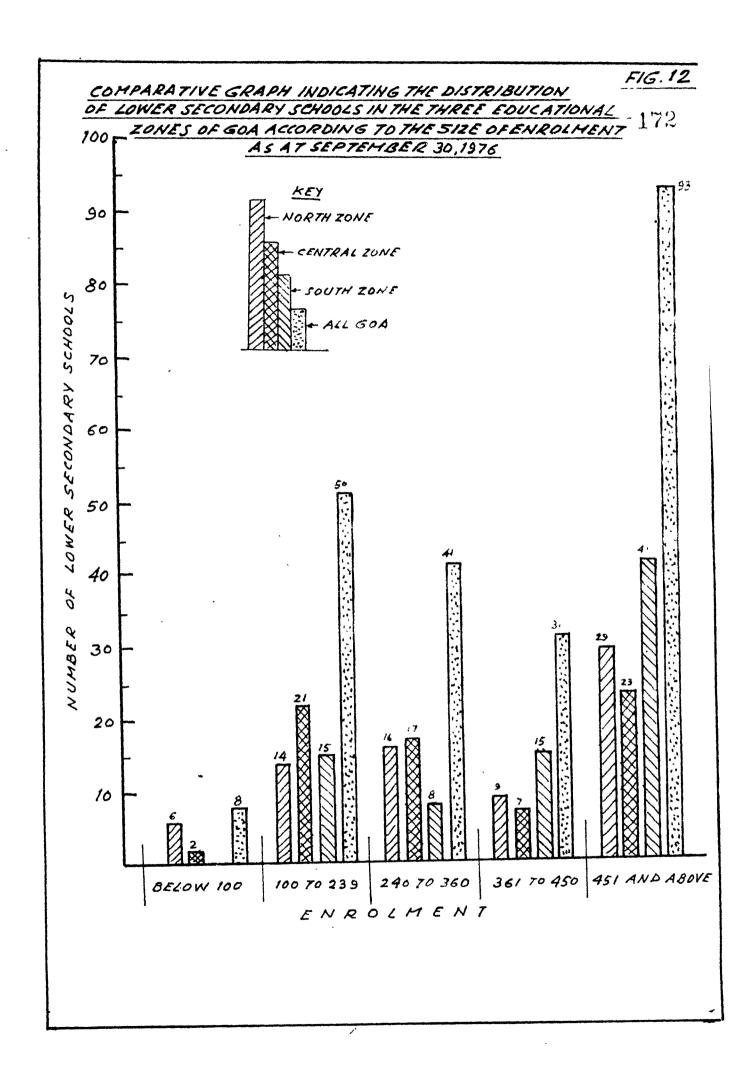
A comparative illustration of the lower secondary schools with the size of their enrolment in the three educational zones, as well as, the overall picture for All-Goa, is provided in Figure 12.

(iv) Higher Secondary Schools and Their Enrolment Size

As at September 30, 1976 there were 14 higher secondary schools/sections in Goa out of which 14.29 percent had an enrolment of less than 100, 57.14 percent had between 190 to 500 students and 28.57 percent above 500, as pointed out in Table XXVII.

(v) Lower Primary Schools according to Number of Teachers employed

The present study revealed that as on September 30, 1976, out of the total of 869 lower primary schools in Goa,



the majority, representing 71.56 percent, had less than 4 teachers. Taking into consideration the optimum of 4 to 5 teachers recommended for a lower primary school by the Education Commission of 1964-66, it would appear that only 22.44 percent of the lower primary schools in Goa would survive the test.

At taluka level, Tiswadi with 50.90 percent, has the best percentage of lower primary schools with 4 to 5 teachers and more, in the Central Educational Zone of Goa, followed by Bardez with 47.06 percent in the North Educational Zone and finally Mormugao with 34.62 percent in the South Educational Zone. It should also be observed that 97.73 percent of the lower primary schools in Satari Taluka and 95.96 percent of the lower primary schools in Sanguem Taluka, operate with less than four teachers. So also the percentage of lower primary schools with less than four teachers is as high as 85.45 percent in Canacona, 84.5 percent in Pernem, 83.08 percent in Quepem and 80.26 percent in Bicholim, as can be verified in Table XXVIII.

(vi) Single Teacher Lower Primary Schools

Regarding single teacher schools there are, in all, 120 such institutions in Goa representing 13.81 percent of the total of 869 Lower Primary Schools. Out of these, the

Central Educational Zone has 58, representing 19.73 percent of its own total of lower primary schools, the North Educational Zone has 41, representing 13.02 percent of its own total of lower primary schools and the South Educational Zone has the lowest number of 21, representing only 8.08 percent of its own total of lower primary schools.

Majority of these schools, representing 56.66 percent appear to have an enrolment of less than 20 students, 89.16 percent below 30, and only 0.84 percent above 40, as pointed out in Table XXIX. It should also be observed that most of these schools are located in Satari Taluka of North Educational Zone and in Sanguem Taluka of the Central Educational Zone.

(vii)Upper Primary Schools according to Number of Teachers engaged

With reference to the distribution of upper primary schools according to the number of teachers engaged, the present study indicates that as on September 30, 1976, out of the total number of 106 upper primary schools, 45.30 percent were found to be operating with less than 7 teachers, 27.35 percent with 7 to 8 teachers, 16.04 percent with 9 and 11.31 percent with more than 12 teachers.

Talukawise, Quepem appears to have the highest number

of schools, representing 66.66 percent of its total to be operating with less than seven teachers, and it is followed by Salcete with 63.64% and Satari with 55.54 percent, as indicated in Table XXX.

(viii) Lower Secondary Schools according to Number of Teachers employed

At the Lower Secondary Level the situation appears to be much better; for out of 223 lower secondary schools in Goa only 12.55 percent have less than ten teachers, 57.40 percent have between 10 and 20, 23.32 percent have between 21 to 30 and the remaining 6.73 percent have more than 30, as shown in Table XXXI. It should also be observed that the South Educational Zone has only 7.59 percent of its lower secondary schools with less than ten teachers whereas the percentage in the Central Educational Zone is as high as 14.29 and in the North Educational Zone it is even higher, reading 16.22 percent. In the group of schools engaging 10 to 30 teachers the South Educational Zone again has the highest percentage of 84.82 as compared to 80.00 percent in Central Educational Zone and 77.03 percent in the North Educational Zone.

4 Overview of Existing School Facilities

(i) Distribution of School Facilities for all Stages and Levels in Goa

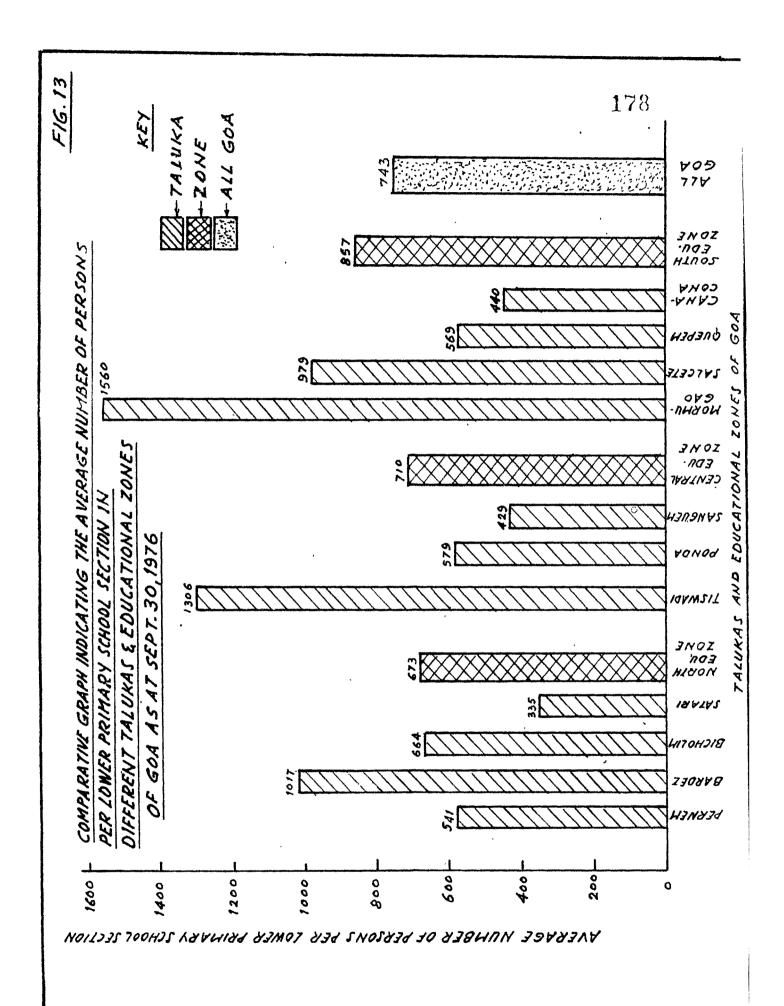
With reference to 1971 population and the school facilities made available for all stages and at all levels in Goa, as on September 30, 1976, the present study indicates that on an average there is a lower primary school section for every 743 persons in Goa, an upper primary school section for every 2439 persons, a lower secondary school section for every 3503 persons and a higher secondary school section for every 56,794 persons, as pointed out in Table XXXII. Considering the situation on the basis of the Educational Zones of Goa, there is a lower primary school section for every 710 persons in the Central Educational Zone, an upper primary school section for every 2732 persons, a lower secondary school section for every 3219 persons and a higher secondary school section for every 46,997 persons. the case of North Educational Zone, every 673 inhabitants have a lower primary school section, every 2093 inhabitants have an upper primary school section, every 3572 inhabitants have a lower secondary school section, and every 66,978 inhabitants have a higher secondary school section. And finally in the case of the South Educational Zone, which appears to be the most neglected zone, there is a lower primary school section for every 857 persons, an upper primary school section for every 2609 persons, a lower secondary school section for every 3699 persons and a higher secondary school

section for every 58,444 persons. Considering the situation talukawise, it appears Satari Taluka has the least number of persons for every lower primary school section but the highest number amounting to 6503 persons for every lower secondary school section. A comparative picture of the lower primary school sections for all the talukas and educational zones of Goa, is provided in Figure 13. Regarding the upper primary school sections the least number of persons per average section seems to be 1603 in Pernem Taluka but the highest is 3,430 in Sanguem Taluka.

Regarding the average number of persons for every lower secondary school section, the lowest figure seems to be 2670 in Bardez Taluka and the second highest is 5,935 in Quepem Taluka, the first being Satari with 6503, as mentioned earlier.

In respect of higher secondary school sections, the lowest number of persons per average section is 29,486 in Canacona Taluka but the highest is 84,590 in Ponda Taluka. Here a note should also be made that Satari and Quepem are the only two talukas without any facility for higher secondary education.

A comparative graph indicating the number of sections at different stages and levels of school education for



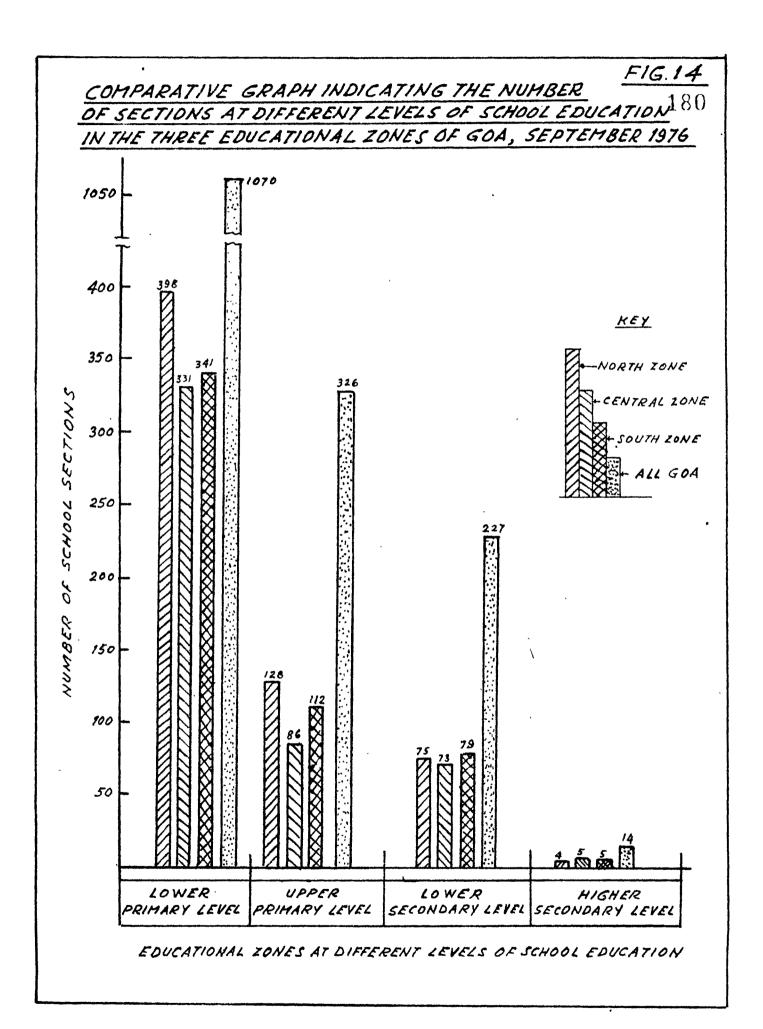
educational zones of Goa, as on September 30, 1976, is provided in Figure 14.

5 Teachers and Professional Training

(i) Teachers in Goa and Their Qualifications

The present study indicates that as On September 30, 1976, there were 7628 school teachers for all categories of school education in Goa, out of which 356, representing 4.67 percent are post-graduates, 26.56 percent graduates, 4.64 percent hold portuguese qualifications or below the level of S.S.C. but the majority of the school teachers representing 64.13 percent are undergraduates with qualifications ranging from S.S.C. or Matriculation upwards, as can be seen in Table XXXIII.

Table XXXIV also provides comparative figures with percentages of teachers and their qualifications for the academic year 1965-66 as recorded in the Second All-India Educational Survey, and for the present year, 1976-77. These figures obviously show an improvement in the qualifications of school teachers in general and those of secondary school teachers in particular. In the academic year 1965-66 only 32.21 percent of the secondary teachers were graduates whereas in the present year of 1976-77, the percentage is as high as 81.78 indluding the post-graduates, representing 16.61



percent of the total as compared to 2.32 percent in the year 1965-66.

In the case of primary education, there were no graduate teachers at all in the academic year 1965-66 where— as as at present, the number represents 12.82 percent, including 22 post-graduates. It should also be observed that the number of primary school teachers with qualification below S.S.C. level in the academic year 1965-66 represented 48.29 percent whereas at present it is only 6.33 percent. A comparative graph of teachers by qualifications for the academic year 1965-1966 and 1976-77 is given in Figure 15.

(ii) Teachers by Stage and Level, Sex and Teacher/Pupil Ratio

Out of 7628 school teachers in Goa, 48.51 percent are engaged at the lower primary school level, 24.80 percent at the upper primary, 25.17 percent at the lower secondary and only 1.52 percent at the higher secondary school level, as illustrated in Figure 17(a).

The overall sex-ratio for all teachers in Goa is

1: 1 with 51.87 percent males and 48.13 percent females.

The sex-ratio for lower as well as for upper primary school teachers is also 1: 1 but at the lower and higher secondary school level it is two males for every female teacher; as indicated in Table XXXV.

The teacher/pupil ratio is 1:29 at the lower primary school level, 1:28 at the upper primary 1:16 at the lower secondary and 1:32 at the higher secondary school level. The overall teacher/pupil ratio for all Goa is 1:26 and the overall sex ratio for boys and girks is 1:1.

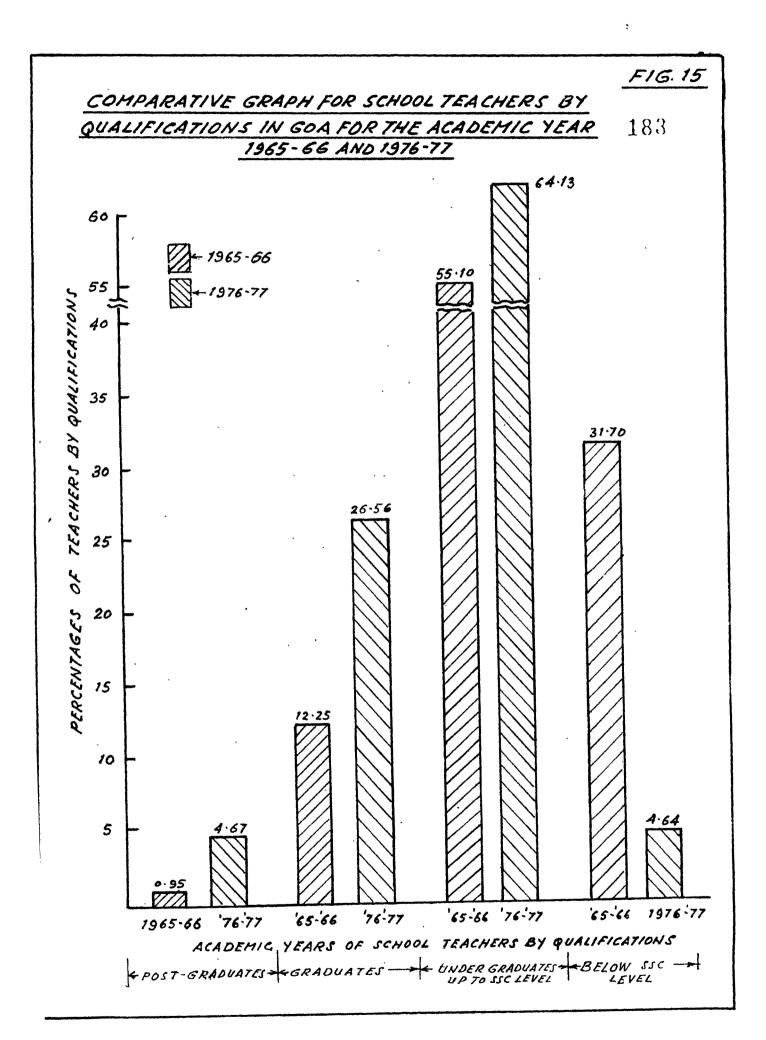
(iii) School Teachers in Goa, Their Area of Work, Management and Training

Out of the total 7628 school teachers in Goa, 5592 are magged representing 73.39 percent/in the primary stage of school education and only 26.69 percent in the secondary stage.

Most of them, representing 59.07 percent teach in schools managed by the Government of Goa and 40.93 percent teach in other schools managed by private agencies. About 75.54 percent of the school teachers are employed in rural areas of Goa and only 24.46 percent in urban areas. Majority of them, representing 70.52 percent are profesionally trained and only 29.48 percent are untrained as noted in Table XXXVI and illustrated in Figure 16.

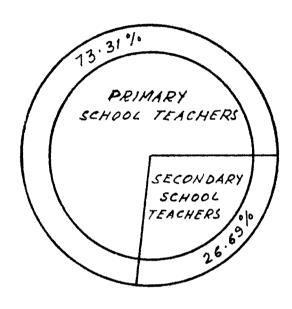
(iv) School Teachers in Goa by Level of Instruction Sex and Training

As already mentioned, the majority of the teachers in Goa are employed in the primary stage of school education and a large number of them representing 48.51 percent of the grand total teach at the lower primary level and only 24.80

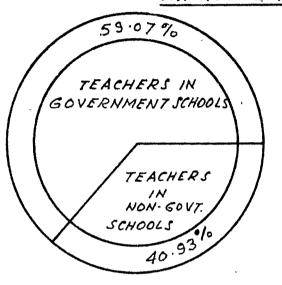


SCHOOL TEACHERS IN GOA BY STAGE, MANAGEMENT, RURAL | URBAN AREAS AND TRAINING AS AT SEPT. 30, 1976

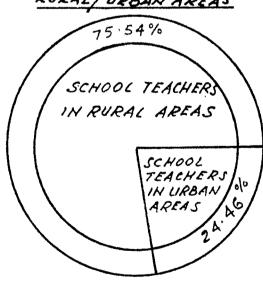
(a) SCHOOL TEACHERS BY STAGE



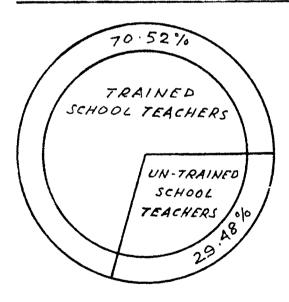
(b) SCHOOL TEACHERS BY HANAGEMENT



(C) SCHOOL TEACHERS IN RURAL/ URBAN AREAS



(d) SCHOOL TEACHERS BY TRAINING



percent at the upper primary. About 25.17 percent of the total teach at the lower secondary level and only 1.52 percent at the higher secondary. Sexwise, the male teachers in Goa represent 51.87 percent of the total and female teachers 48.13 percent giving a sex ratio of 1:1.

Out of the total of 3957 male teachers, 73.28 percent are professionally trained and only 26.72 percent are untrained whereas in the case of female teachers 67.53 percent are trained and 32.47 percent are untrained. About 49.51 percent of the trained teachers in Goa teach at the lower primary level, 22.23 percent at the upper primary, 26.10 percent at the lower secondary level and 2.16 percent at the higher secondary, as may be observed in Table XXXVII and Figure 17.

(v) Untrained Teachers in Goa, their Sex, Management, Area of Work, School Stage and Level of Employment

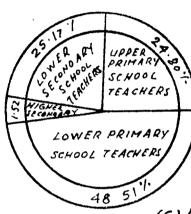
The present study indicates that as on September 30,1976 there were 2249 untrained teachers in Goa, representing 29.48 percent of the total of 7628. Out of these the majority representing 71.59 percent teach in schools managed by non-Government private agencies and only 28.41 percent in schools managed by Government of Goa. Most of them are engaged in rural areas of Goa, representing 77.23 percent, and only 22.77%

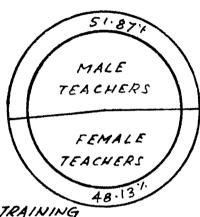
186 *FIG. 17*

SCHOOL TEACHERS IN GOA BY LEVEL OF INSTRUCTION, SEX

(A) SCHOOL TEACHERS BY LEVEL OF INSTRUCTION

(b) SCHOOL TEACHERS BY SEX

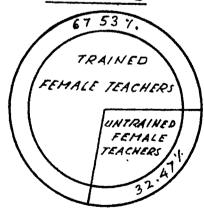




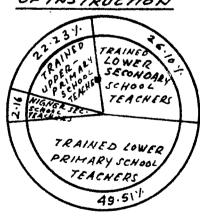
(C) MALE TEACHERS BY TRAINING



(d) FEMALE TEACHERS BY TRAINING



(e) TRAINED TEACHERS BY LEVEL



percent in urban areas. The majority of the untrained teachers, representing 53.00 percent are women and 47.00 percent are men as shown in Table XXXVII. There are no untrained teachers at the higher secondary school level but the number at the lower secondary represents 22.94 percent of the total. At the upper primary level the percentage is 30.95 but the highest number representing 46.11 percent are engaged at the lower primary level.

Considering the two stages of school education separately, the majority of the untrained teachers representing 77.06 percent of the total of 2249, are employed at the primary stage of school education in Goa and the secondary stage has only 22.94 percent, as may be observed in Table XXXVI and Figure 18.

(vi) Teacher Training Facilities in Goa

As on September 30, 1976 there was only one secondary teacher training institution in Goa, providing professional training at B.Ed. degree level for about 100 graduate - students per year through English medium of instruction.

With regard to the primary education the study indicated that there were four institutions imparting professional training for primary teachers in Goa. Out of these only one offers a one year Diploma course for about 40 undergraduate students with teaching experience. The other three also

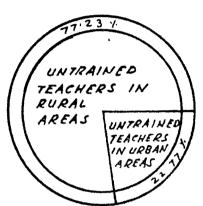
188 *FIG.18*

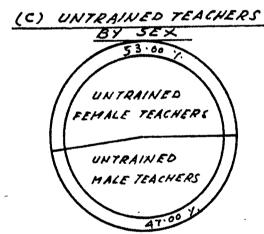
UNTRAINED TEACHERS IN GOA BY MANAGEMENT, RURAL | URBAN AREAS, SEX, LEVEL OF INSTRUCTION AND SCHOOL STAGE AS AT SEPTEMBER 30, 1976

(a) UNTRAINED TEACHERS BY HANAGEMENT

(b) UNTRAINED TEACHERS IN RURAL | URBAN AREAS

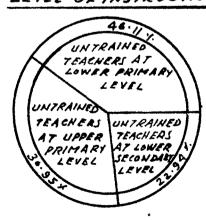


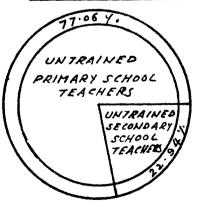




(d) UNTRAINED TEACHERS BY

(e) UNTRAINED TEACHERS BY
SCHOOL STAGE





provide a diploma course but of two years duration meant for about 260 students with S.S.C. or higher qualifications, as noted in Table XXXVIII. All the teacher-training institutions are co-educational institutions managed by private agencies with the exception of one primary teacher training college which is managed by Government and is the only one located in the rural area of Bardez in the North Educational Zone of Goa.

The secondary teacher training college which also houses one of the primary teacher training colleges providing a one year Diploma course for primary teachers in Goa, is located in the urban area of Tiswadi in the Central Educational Zone of Goa. The remaining two institutions for primary teacher education are located in the urban area of Salcete in the South Educational Zone of Goa.

(vii) Teacher Educators by Sex and Qualifications

As may be noticed in Table XXXIX out of the total of 15 members of the academic staff of the secondary teacher training institution, 53.33 percent are females and 46.67 percent are males giving a sex ratio of 1:1 whereas in the case of primary teacher training institutions out of the total of 25, 84.00 percent are males and only 16.00 are females thus providing a sex ratio of 5 males to every female

teacher educator. Regarding the qualifications of the academic staff the secondary teacher training institution has 13.33 percent at the Doctoral level, 13.34 percent at graduate level but the majority representing 73.33 percent hold post-graduate qualifications, as indicated in Table XXXIX.

In the case of primary teacher training institutions, 40.00 percent hold post-graduate qualifications, 32.00 percent are graduates and 28.00 percent are undergraduates, as shown in Table XXXIX.

6 In-Service Training of School Teachers

(i) Selection of Respondents for Questionnaire

About fifty respondents from the educational field connected mainly with school education in Goa were selected at random as indicated in Table XL to answer a specially prepared questionnaire regarding the in-service training needs of school teachers in Goa.

(ii) Qualifications and Sex of Respondents

Out of the total of 50 respondents, the majority, representing 52.00 percent were post-graduates, 32.00 percent were graduates and 16.00 percent were undergraduates. Although the majority of the respondents were men, more than one fourth

representing 26.00 percent were women as shown in Table XLI.

(iii) Respondents' Teaching and Administrative Experience

According to the analysis each respondent, on an average, had about 14 years of teaching experience and about 5 years of administrative service, as indicated in Table XLII and XLIII respectively.

(iv) Reasons for and against the Need for an Intensified In-service Training Programme for Teachers

The analysis of the respondes to the questionnaire items No.8, 9(I - X), and 10(I - XIII) noted in Table XLIV indicates that 86% of the total of 50 respondents believe that there is at present an urgent need for an in-service training programme for school teachers in Goa and only 14.00 percent of the respondents disagreed.

Out of those who disagreed about 85.7 percent feel that there is no need at present to provide an in-service training for school teachers in Goa because almost all teachers in Goa are professionally trained', suggesting thereby that the teacher learns everything that there is to be learnt once for all time.

About 71.43 percent of the respondents who disagreed, feel that the 'Government is spending a lot of money on the

expansion needs of education and that it is more than enough'.

About 57.10 percent of the respondents who disagreed feel 'there is no separate arrangement in Goa to provide in-service education on a full time basis'.

Some others, representing 28.58 percent of those who disagreed, are of the opinion that 'the quality of school education in Goa is very high and continuously rising' and therefore they feel there is no need for an in-service training programme for school teachers in Goa. About 14.29 percent of the respondents who disagreed feel that there is no need at present to provide in-service training programme for school teachers in Goa because: (a) 'Teachers are born and not made', (b) 'There is no incentive or material gain to the individual teacher', (c) 'It is an unnecessary waste of time and money which the Government can ill afford', (d) 'It upsets the routine schedule of the school as well as that of the individual'.

On the other hand about 95.34 percent of the respondents in favour of in-service training for school teachers in Goa, feel there is at present an urgent need for orientation and content course in the teaching of New Mathematics at all stages of school education in Goa. An equally high number,

representing 93.03 percent of the respondents in favour of in-service training programme also feel that there is such a need for subjects like Works-Experience and Vocational Guidance. There are others, representing 90.71 percent who are of the opinion that there is a need at present for special orientation course to help the teachers at all stages:

- (a) 'in the new approach to science teaching',
- (b) 'to learn the technique of adapting and improvising the necessary teaching aids with the help of the material available locally',
- (c) 'to update their knowledge and understanding of the latest developments in education'.

About 76.72 percent of the respondents in favour of in-service training programme feel that there is at present an urgent need to help the teachers particularly at the primary level who are not adequately equipped either in content or in the technique of teaching science.

A number of respondents, representing 74.41 percent of those in favour of in-service training programme for school teachers in Goa, are concerned with the deteriorating standard of education in Goa and of school education in particular and attribute the cause to the failure on the part of the teachers to make a determined effort to revise and improve their knowledge of the subject-matter. Consequently

they feel the situation could be improved with the help of in-service training programme. About 72.09 percent of the respondents in favour of in-service training programme are also concerned with the increasing number of primary school teachers in Goa who are not adequately prepared for the subjects they are expected to teach and are of the opinion that if they are not helped through in-service training programme, the school education in Goa is bound to deteriorate further.

About 65.10 percent of the respondents in favour of the in-service training programme feel the neglect of the same is likely to make many teachers in Goa lose their enthusiasm and commitment for the teaching profession.

A good number of respondents representing 62.77 percent favouring the in-service training programme for school teachers in Goa, feel concerned about the poorly qualified teachers employed in single teacher schools who have difficulty in managing different subjects at different levels. They are of the opinion that special help should be given to them through in-service training programme since there are a good number of teachers particularly at the primary stage of education without adequate training **about 55.79 percent of the respondents feel a special in-service training course should be conducted to help these teachers to obtain at least

the minimum skill required. About 46.52 percent of the respondents also feel concerned about untrained teachers who continue to teach in schools without professional training for at least a minimum period of four years. They also feel concerned about those teachers in primary schools with minimum or even lower qualifications and are of the opinion that special in-service training courses should be arranged to help them to improve their qualifications and the professional skill.

(v) Areas of Priority in In-service Training Programme

The analysis of the responses to questionnaire item No.11 (I - IV) as noted in Table XLV indicates that the maj@rity, representing 53.49 percent of the respondents are of the opinion that the first priority area in the in-service training programme should be to provide orientation-cumcontent courses in the up-graded or newly introduced subjects in the school curriculum of Goa.

The second area in line of priority favoured by a majority, representing 41.86 percent of the respondents, is to familiarize the teachers in Goa with the latest development in theory and practice of education as well as to revise and improve their knowledge of the subject matter.

About 32.56 percent of the respondents representing the majority, feel that the third area of priority should be to improve the academic-cum-professional qualifications of school teachers in Goa with the minimum or lower qualifications.

The fourth area and the last in the line of priority according to the majority, representing 53.49 percent of the respondents, is to help the untrained teachers serving in different schools in Goa.

(vi) Separate arrangement necessary to organise and conduct In-service Training Programme

The analysis of the Questionnaire Item No.12 (I-X) appended in Table XLVI indicates that 62.81 percent of the respondents are of the opinion that a separate arrangement to organise and conduct the in-service training programme is necessary in view of the fact that the aforementioned four areas of priority, involve massive work, careful planning, efficient implementation and effective results in the shortest time possible.

Although the opinion of the respondents varies a great deal as to who should organise and conduct the separate arrangement for in-service training, the majority of the respondents, representing 67.42 percent feel it could be carried

out successfully by the recently established State Institute of Education. About 58.12 percent of the respondents are of the opinion that it should be a coordinated effort of different agencies whereas some others, representing 55.76 percent of the respondents feel, a special in-service training centre should be established to deal with all matters connected with the in-service training of school teachers in Goa. About the same number of respondents also feel that the national organizations like the NCERT could help and some others representing 46.47 percent of the respondents, are of the opinion that the in-service training programme could be carried out with the help of school complexes organised in each of the eleven taluxas of Goa.

(ii) General conditions and fractical difficulties of In-service Training Programme

Analysis of the Questionnaire Item No.13 (I - IX) noted in Table XLVII.

In view of the fact that all teachers have to be brought up-to-date in their knowledge and understanding of the latest development in education as well as in the knowledge of the subject - matter, about 97.67 percent of the respondents believe that arrangements should be made for full-time inservice training of teachers at regular intervals so that every

teacher in Goa will get an opportunity for such a training at least once in a period of five years.

About 95.34 percent of the respondents feel that preparation of improvised apparatus and teaching aids should be encouraged as a part of the preparation for all school subjects.

In order to evaluate the impact of in-service training programme a large number of respondents, representing 90.72%, feel a suitable system of evaluation would need to be evolved. An equal number of respondents also feel that teacher educators should be provided with regular opportunities to observe the work of teachers trained at the centre or the institution so as to provide for a systematic feedback and a continuous evaluation and revision of courses, strictly according to the field requirements. Some others representing 88.40 percent of the respondents are of the opinion that there should be an adequate machinery for follow-up work both by the inspectors of schools and the teacher educators. They also feel that courses of studies in the in-serfice training Centre/Institution should be planned and adjusted on the basis of a careful assessment at the end of each term.

About 86.08 percent of the respondents feel that the in-service training syllabus should also include a remedial

course for those with specific weaknesses, as revealed by a diagnostic test given at the time of admission.

About 66-00% of the respondents feel that the inservice training should be made compulsory for primary as well as for secondary teachers in Goa. The Analysis of Questionnaires Item No.14(I-V) also noted in Table XLVII indicates that the majority, representing 44.19 percent of the respondents, believe that the compulsory course of in-service training should be conducted on a full time basis for a period of 30-40 days. About 86.08 percent of the respondents feel it will be necessary to arrange for the teachers' residential accommodation at the in-service training centre itself so that all the time could be profitably utilized.

An equally large number of respondents representing 83.76 percent are of the opinion that payment of a special allowance should also be made to every teacher under taining.

In order to conduct various courses more effectively and efficiently at the in-service training centre/institutions, about 81.39 percent of the respondents feel that all the necessary material as well as the equipment together with the library reference books should be made available without difficulty to the participants of various courses.

About 74.46 percent of the respondents felt concerned about the needfor special personnel necessary to conduct various courses at the 'In-service Training Centre' and about 62.81 percent suggested there should be a criteria established for the selection of teachers for various in-service training courses.

7 School Inspection and Supervision

(i) Selection of Respondents for Interview:

For the purpose of identifying various problems and issues connected with school inspection and supervision in Goa, 45 respondents from the field of school education were selected at random for an interview, as indicated in Table XLVIII.

Out of the total of 45 respondents, 37.78 percent were teachers and assistant-teachers, 33.34 percent were members of the inspectorate staff, 13.34 percent were heads of schools, 4.44 percent were supervisors and senior instructors, 4.44 percent were members of the management board, 4.44 percent were officers from the Directorate of Education and 2.22 percent represented the State Institute of Education in Goa.

(ii) Qualifications of Respondents selected for Interview

As noted in Table XLIX the respondents with post-

graduate qualifications represented 46.67 percent of the total, the next highest number was that of graduates representing 40.00% of the total, and the undergraduates represented 13.33 percent of the total of 45 respondents.

(iii)Responses to Interview Schedule

A general view of the analysis of the responses to the interview schedule regarding the school inspection and supervision in Goa indicates that about 98.00 percent of the respondents interviewed appear to be aware of the modern concept of school inspection and supervision and do consider its main purpose to be to improve the professional efficiency of the teachers through help and guidance. However, only about 78 percent believe that it is a cooperative enterprise in which both, the teachers as well as the inspecting officers, have to participate actively to find solutions to the common problems. A small section of the inspectorate staff seem to think that their task ends after locating the fault. They feel the solution to the problem must be found by the teacher himself.

About 83 percent of the inspectorate staff are well aware that the democratic concept of inspection and supervision demands constant effort on the part of the inspecting officers to stimulate, coordinate and guide the continued growth of

the teachers in a school both individually and collectively. The remaining 17 percent of the inspectorate staff feel that their duty is to find faults and take disciplinary action against the defaulting teachers.

About 94 percent of the teachers interviewed feel they need the help and services of a constructive nature from the Inspectorate staff by way of model lessons, etc. rather than merely being told what their faults are.

All the heads of schools and supervisors and about 75 percent of the inspectorate staff interviewed realise that under the present conditions they are unable to achieve the main purpose of the modern concept of school inspection and supervision in Goa. All the respondents agree in general that there is a vast scope for improving the present system of inspection and supervision of schools in Goa but about 45 percent of the respondents feel that most of the problems arise due to the lack of time and the shortage of adequately qualified personnel.

About 40 percent of the teachers and heads of schools are of the opinion that the major drawback is the lack of subject experts in the inspecting team who could speak with authority and give practical demonstration.

Almost 28 percent of the respondents in general feel that many problems are created as a result of too much stress being laid presently on the administrative and financial aspects rather than on the academic and instructional aspects demanded by the changing concept of school inspection and supervision. About 78 percent of the inspectorate staff and all the other respondents except one, agree that a mere proforma of an inspecting report to fill in, is not enough. A code of inspection or a set of clearly defined rules are necessary to guide the inspecting officers and make their task more effective and meaningful to all concerned.

More than 66% of the respondents including all the heads of schools and teachers agree, that the formation of a school complex for a group of villages and the introduction of Panel Inspection for each taluka would help a great deal to make the school inspection and supervision more effective. They also feel that subject experts and experienced teachers should be included in the inspection panel. Some of the respondents representing almost 68 percent of the total agree that the subject experts should be made responsible not only for inspecting class teaching but also for evaluating how a particular subject is being taught on the whole, in a particular school.

A large majority representing about 88 percent of the teachers interviewed feel that the inspecting officer should deal with the teachers as a friend, guide and a helper and should discuss the problems related to class teaching with them, as individuals as well as in a group, before and towards the end of his visit.

About 85 percent of the teachers, supervisors and heads of schools are of the opinion that the 'Inspecting Team' should have a general meeting with the head of the school and his staff at the beginning of the inspection as well as towards the end so as to provide an opportunity to discuss all the issues and problems concerned. All but one of the respondents appeared to realize the worthwhileness of the follow-up of the inspection report in the improvement of the school programme and felt it should be given the time and priority it deserves.

Regarding surprise visit by inspecting officers, almost 60 percent of the respondents think it does not contribute much but rather promotes fear and suspicion. However, about 80 percent of the respondents agree that the inspecting officers visits should be more frequent but friendly.

More than 66% of the respondents agree that there is at present a great need to provide stimulation, guidance and assistance to organize effective school improvement programmes in Goa.

About 80 percent of the teachers interviewed are of the opinion that the inspecting officers should allot a fixed time so that teachers could approach them in their office with their class-room problems and difficulties for their guidance.

About 78 percent of the inspectorate staff are of the opinion that a regular provision for an in-service training programme would help a great deal to develop and improve their professional growth and efficiency.

(iv) Review of Proformas used and Sampling of Inspection Reports

A general analysis of the proforms used indicates that more weightage is given to factual data about the institution, its funds and finance, its buildings and administration rather than the actual teaching of subjects, instructional material, school and community relationship and co-curricular activities.

The general feeling is that these proforms are not comprehensive enough to evaluate a school programme in terms of the demands imposed by the modern concept of school inspection and supervision. It seems it would be necessary to improve the proforma in order to make it more reliable, comprehensive, less subjective and more meaningful.

A sample analysis of inspection reports indicated that the inspecting officer visits every school in his jurisdiction, once in a year and writes a descriptive report of inspection and sends a copy of the same to the school for implementation of his suggestions. These reports, under the present practice do not appear to be very helpful to the school to improve the instruction in the classroom, which, according to the modern concept of school inspection and supervision, appears to be the main purpose of the inspecting officer's visit. The analysis also indicated that the inspecting officer tries to evaluate a particular teacher, teaching a particular subject, in a particular class but the report provides no indication at all as to how the subject as a whole is being taught in a particular school.

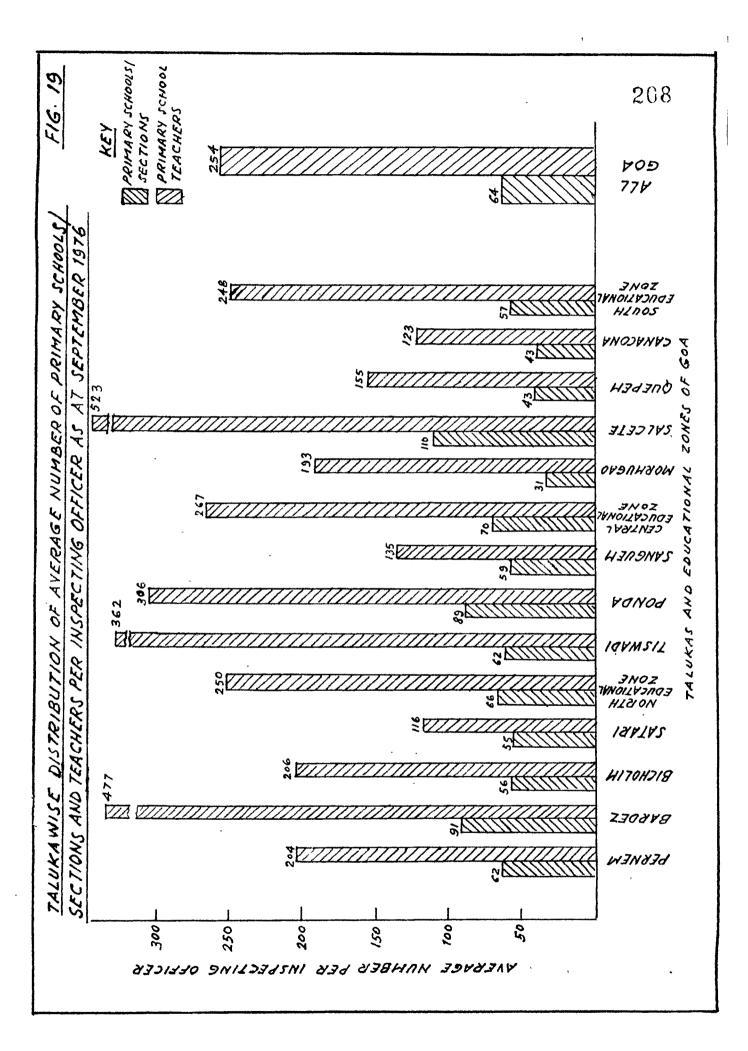
Most of the inspecting reports appear to emphasise the factual data rather than the functional part of any school aspect, thus focussing the attention on the provision for a

certain activity in a school but ignoring entirely the way it is being carried out.

(v) Inspectorate Staff and average number of Primary Schools/Sections, Teachers and Pupils

An analysis of talukawise distribution of inspecting officers for primary stage of school education in Goa as on September 30, 1976 indicates that each inspecting officer at All-Goa level had on an average 64 primary schools/sections, 254 primary school teachers and 7330 primary school pupils. The position in the educational zones of Goa shows that the Central Educational Zone has the highest average number of primary schools/sections, teachers and pupils per inspecting officer. The North Educational Zone comes next with the highest average number of schools/sections and teachers but the least average number of pupils, per inspecting officer. The South Educational Zone has the lowest average number of schools/sections and teachers per inspecting officer, as appended in Table L.

Talukawise, Satari, has the lowest average numbers of primary schools/sections and teachers per inspecting officer and Salcete Taluka has the highest in both cases. A comparative graph indicating the average number of primary schools/sections and teachers in all the talukas and educational zones is provided in Figure 19.



(vi) Inspectorate Staff for Secondary Schools

According to the present study as on September 30, 1976, there were six inspecting officers for secondary stage of school education in Goa, made up of 241 secondary schools/sections, 2036 secondary school teachers and 34,056 students, as indicated in Table LI.

Each inspecting officer had on an average 40 secondary schools/sections, 339 teachers and 5676 secondary students.

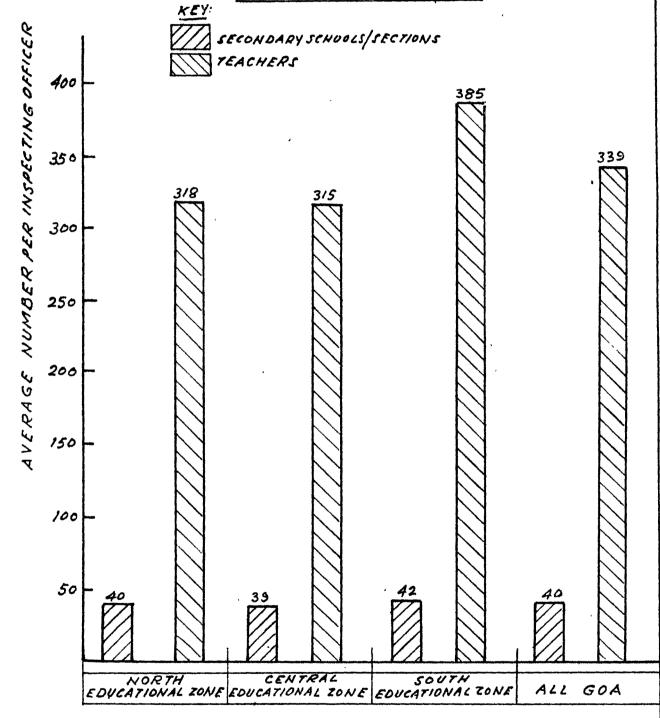
On the basis of the educational zones of Goa, each inspecting officer in South Educational Zone had the highest average number of secondary schools/sections, teachers and students whereas the inspecting officer in the Central Educational Zone had the lowest average number of secondary schools/sections and teachers, and the one in the North Educational Zone had the lowest average number of students. A comparative graph indicating the average number of secondary schools/sections and teachers is provided in Figure 20.

The overall analysis and interpretation of the data collected indicates a strong need for the re-organisation of the school facilities presently made available in Goa which obviously leads to the subject of the next Chapter entitled "Planning School Location".

210 FIG. 20

COMPARATIVE GRAPH INDICATING THE AVERAGE NUMBER OF SECONDARY SCHOOLS SECTIONS & TEACHERS PER INSPECTING OFFICER IN EDUCATIONAL ZONES OF GOA

AS AT SEPTEMBER 30, 1976



EDUCATIONAL ZONES OF GOA