

## CHAPTER V

### TRIBES IN ORISSA AND THEIR ECOLOGY

#### SETTLEMENT PATTERNS

The geographical conditions mostly determine the human habitation pattern and the ways of living of the people. Spatial distribution of population and other environmental conditions are relevant factors of ecology which constitute important considerations for provision of educational facilities. A certain size of population is necessary in a compact area to justify establishment of a school. A village being a compact area of human habitation and the primary unit of human living, its size, Physical extension and population are often taken into consideration for establishment of educational institutions.

Now-a-days by a village we not only understand a unit of human habitation but also a revenue village the boundaries of which have been delimited by the revenue administration. There are 51639 such villages in Orissa according to 1971 census of which 4647 were uninhabited and the remaining 46992 inhabited. During the Fourth All India Survey operation the number of inhabited villages was counted to be 46535 and 5104 villages uninhabited.

The inhabited villages are of varying sizes. There are 31 villages in the State which have more than 5000 population each whereas there are 23289 villages which have less than 300 population. Moreover, there are some villages which extend over a vast area covering several kilometres in length and breadth and such villages may have too many hamlets. It has not been possible to take the village as a unit for opening of schools because of the irregular size of the villages in respect of population and extension. The main difficulties for taking a village as a unit for opening of schools are given in the following paragraph.

There are some villages which extend over a large area having several hamlets quite apart from one another and from the main village. The distance from one end of the village to the other may sometimes be several Kilometres. Children of one end cannot conveniently attend a school located at the other end. There are many villages which have very small population yet extend over a vast area.

Yet a village being the primary unit of human habitation, its size determines whether one or more or no school is to be established. It is necessary to have a rough idea about the size of the tribal villages in order to have an estimate of the percentage of the villages where no formal school can be established.

If 50 per cent or more of the population of a village belong to Scheduled Tribes it is taken as a tribal village (Note. 52, pp.35).

15791 villages of the State constituting 33.93 per cent do not have any Scheduled Tribe population and 10900 villages (23.42 per cent) have high concentration of tribal population ranging from 76 per cent to 100 per cent. In 14259 villages (30.63 per cent) the tribal population is more or less dispersed. 5585 villages (12.00 per cent) have 51 to 75 per cent tribal population. According to the commonly accepted definition of a tribal village (50 per cent or more population belonging to Scheduled Tribes) 16485 villages of the state may be taken as tribal villages.

It is significant to note that out of 10900 villages having 75 to 100 per cent tribal population 8484 (77.83 per cent) have less than 300 population. Similarly out of 5585 villages having 51 to 75 per cent tribal population 3042 constituting 54.46 per cent have less than 300 population. Thus out of 16485 tribal village 11526 (70.00 per cent) have less than 300 population and do not justify opening of a single teacher primary school.

TABLE - 6  
 CLASSIFICATION OF VILLAGES ACCORDING TO PERCENTAGE  
 OF SCHEDULED TRIBE POPULATION

Population Slab.	Number of villages according to percentage of Scheduled Tribe Population					Total No. of villages.
	0%	1 to 25%	26 to 50%	51 to 75%	76 to 100%	
5000 and above.	11	15	4	1	-	31
2000 to 4999	501	388	79	46	21	1035
1000 to 1999	1825	1305	482	267	169	4048
500 to 999	3730	2377	1240	1045	878	9270
400 to 499	1372	847	536	487	528	3770
300 to 399	1838	1050	687	697	820	5092
Below 300	6514	3029	2220	3042	8484	23289
Total	15791 33.93%	9011 19.36%	5248 11.27%	5585 12.00%	10900 23.42%	46535

( Note. 52 )

A village may have one cluster of houses in a compact area or it may have several distinct clusters of different sizes each having a local name. Each distinct cluster of houses is called a habitation (Note.52). The size of a habitation is determined by its population. Size of a habitation is the most important factor for consideration for opening of schools. When the population of a habitation is considered adequate for opening of a school attempts are made for establishing schools either in public or private sector. The habitation being considered a suitable unit for establishment of schools, the primary function of all educational surveys is to identify distinct habitations and determine their size by enumerating their population. Sometimes several habitations may lie close to one another forming habitation clusters. Establishment of one school may satisfy the educational needs of several habitations<sup>s</sup> of the cluster.

It is, therefore, necessary to identify the habitations correctly, determine the size of each by enumerating the population and have an educational mapping with location of the habitations so as to assess the adequacy of the existing provisions and plan for future requirements.

The Third All India Educational Survey conducted in 1974 (Date of reference - 31.12.73) identified 64194 habitations in Orissa. During the Fourth All India Educational Survey conducted in 1978 (Date of reference 30.9.1978) 64835 habitations were identified in different population slabs. Out of 64835 habitations 25853 were predominantly inhabited by scheduled tribes.

Table -7 gives a good idea about the tribal settlement pattern. Out of 25853 tribal habitations 9761 constituting 37.75 per cent have less than 100 population and 6936 habitations (26.82 per cent) have a population between 100 to 199 each. Thus 64.57 per cent of the total number of habitations numbering 16697 are very small habitations having population less than 200.

## SCHEDULED TRIBE HABITATIONS IN VARIOUS POPULATION SLABS (DISTRICT-WISE)

Name of District	POPULATION SLAB										Total Below 500	Total
	5000 and above	2000 to 4999	1000 to 1999	500 to 999	400 to 499	300 to 399	200 to 299	100 to 199	Below 100	Below 500		
Balasure	-	-	5	17	14	35	78	136	166	429	451	
Bolangir	-	-	7	86	43	51	77	90	49	310	403	
Cuttack	-	1	7	30	17	28	64	100	61	270	308	
Dhenkanal	-	-	2	24	31	61	107	211	214	624	650	
Ganjam	-	-	1	31	27	62	209	578	1164	2040	2072	
Kalahandi	-	-	12	129	81	124	203	357	600	1365	1506	
Keonjhar	-	1	43	257	113	181	246	229	172	941	1242	
Koraput	-	2	50	483	348	595	1167	2086	2795	6991	7526	
Mayurbhanj	-	3	35	379	261	411	674	923	774	3043	3460	
Phulbani	-	-	1	29	26	84	200	667	1888	2865	2895	
Puri	-	-	-	7	12	15	58	160	348	593	600	
Sambalpur	-	-	21	152	95	165	246	391	513	1410	1583	
Sundargarh	-	2	28	173	138	259	532	1008	1017	2954	3157	
Orissa	-	9	212	1797	1206	2071	3861	6936	9761	23835	25853	
Percentage	-	0.03	0.82	6.95	4.66	8.01	14.93	26.82	37.75	92.19	100.00	

( Note. 52 )

Only 9 habitations (0.03 per cent) belong to 2000 to 4999 population slab, 212 (0.82 per cent) to 1000 to 1999 population slab and 1797 (6.95 per cent) to 500 to 999 slab, 7.80 per cent of the tribal habitations have population more than 500, the remaining 92.20 per cent numbering 23835 have population less than 500.

#### PROVISION OF SCHOOLING FACILITIES

Government of Orissa have developed a two point norm for opening of educational institutions, viz -(a) population (b) Distance. Schools are permitted to be opened only when both the norms are satisfied. The following Table gives the relevant age-group, the population and distance fixed for establishment of schools.

TABLE -8  
NORM FOR OPENING OF SCHOOL IN ORISSA

Type of School (1)	Age-group	Population	Distance
L.P./U.P. School	6-11	300	1 K.M.
M.E.School	11-14	500	3 K.M.
High School	14-16	6000	8 K.M.

A rationale of the norms - The working group on universalization of Elementary Education of the Ministry of Education and Social Welfare, Government of India in their interim report gave the following view.

"The state should lay down criteria for the location of Primary and Middle schools : these will have to be related to the population served as well as distances which children will have to walk every day to reach the schools. These will obviously vary from region to region, depending upon the prevailing settlement patterns and natural conditions"(Note .75,pp.7).

On the basis of these criteria, detailed plans and maps (with the block as a unit) will have to be prepared to ensure that almost all children have a primary and middle school within easy walking distance from home.

In pursuance of these directives Government of Orissa decided that the usual distance between two primary schools should be one Kilometre. A child in the 6-11 age group is not required to walk more than one kilometre distance which is considered to be an easy walking distance for them. Similarly the distance between two M.E.Schools is 3 Kilometres which is considered to be an easy walking distance for that age group. In case of High Schools coverage 8 K.M. distance by a child of 14-16 age-group is not justified.

A school is an economic unit of learning. When a school is established and one or more teachers are engaged, it has to be seen that the services of the teacher(s) are optimally utilised. At the primary stage for optimal utilisation of the services of the teacher(s) the teacher-pupil ratio is decided to be 1:35. Currently it has been enhanced to 1:40 due to increase in the demand for more teachers consequent upon increase of enrolment. But this is a temporary phase likely to be discontinued as soon as some more budgetary provisions are available. If the normal teacher-pupil ratio is taken as 1:35, a minimum population of 300 is necessary to maintain a single teacher primary school. According to the projections made by the Registrar General of India the number of children in the 6-11 age group is 12.55 per every hundred. In order to have 35 children in 6-11 age-group a population of 300 is the minimum necessity. A habitation or a cluster of habitations having a population of 300 in the minimum justifies location of a primary school.

Similarly if a habitation or cluster of habitations has a population of 500/6000, establishment of a middle/high School is justified provided there is no middle/high school within a distance of 3 K.M./8 K.M. respectively.

TABLE - 9  
SCHEDULED TRIBE HABITATIONS WITH AND WITHOUT PRIMARY SCHOOLS/SECTIONS.

	POPULATION SLABS										Total	Percentage
	5000 and above	2000 to 4999	1000 to 1999	500 to 999	400 to 499	300 to 399	200 to 299	100 to 199	Below 100			
With a Primary School/ Section in the habitation.	-	9	204	1690	1045	1544	2253	2308	780	9833	38.03	
With a Primary School/ Section within 0.5 K.M.	-	-	5	39	52	129	354	944	1498	3021	11.68	
With a Primary School/ Section 0.5 to 1 K.M.	-	-	2	33	58	209	565	1468	2414	4749	18.36	
Sub-Total	-	9	211	1762	1155	1882	3172	4720	4692	17603	68.08	
With a Primary School/ Section 1.1 to 1.5 K.M.	-	-	-	7	14	58	152	392	659	1282	4.95	
With a Primary School/ Section 1.6 to 2 K.M.	-	-	-	16	19	77	282	776	1590	2760	10.67	
More than 2 K.M.	-	-	1	12	18	54	255	1048	2820	4280	16.27	
Total	-	9	212	1797	1206	2071	3861	6936	9761	25853		

( Note. 52 )



The Fourth All India Educational Survey conducted during 1978 with the 30th September, 1978 as the date of reference identified 25853 tribal habitations in the state.

In the context of universalization of elementary education programme as well as provision for educational opportunity, it is necessary to examine how many of the tribal habitations have been provided with schooling facilities within easy walking distance.

Out of 25853 tribal habitations 9833 habitations have primary school/sections within them, 3021 habitations are served within 0.5 K.M. and 4749 habitations are served within 1 K.M. Thus 17603 habitations constituting 68.08 per cent have been served either within the habitations or within easy walking distance. 8250 tribal habitations still remained unserved by primary schools/section by the time of the Fourth Educational survey which constitute 31.92 per cent of the total number of tribal habitations of the State.

Out of the 8250 habitations unserved by primary schools/sections 5069 habitations belong to the population slab below 100 and 2216 belong to the population slab 100 to 200. Hardly 12 children in the age group of 6 to 11 will be available in the first category of habitations and 25 in the second category of habitations. It will be highly uneconomic to establish primary schools in the habitations having less than 200 people. There is justification in opening regular primary schools in the habitations having a population of more than 200. The State Government have recently taken decisions to this effect. Thus the remaining 965 unserved habitations deserve primary schools within the habitations. Different arrangements are to be made for the habitations having less than 200 population. Nonformal primary centres (Prathamika Chatsali) are being opened in these habitations which are more suitable for the tribal communities yet economic in character.

As far as provision of schooling facilities for the tribal habitations at the primary stage is concerned Bolangir district stands the first position. Out of 403 tribal habitations 364 have been provided with primary schooling

TABLE - 10  
 INTER DISTRICT DISPARITY  
 SCHEDULED TRIBE HABITATIONS WITH AND WITHOUT PRIMARY SCHOOL/SECTION (DISTRICT-WISE)

Name of the District	HABITATIONS WITH PRIMARY SECTIONS AT DISTANCE OF									
	Within the habitation	Upto 0.5 K.M.	0.6 to 1.0 K.M.	Upto 1 Km.	1.1 to 1.5 K.M.	1.6 to 2.0 K.M.	More than 2 K.M.	Total unserved	Total	
Balasore	82	131	153	366(81.15)	13	49	23	85(18.85)	451	
Bolangir	320	14	30	364(90.32)	8	22	9	39(9.67)	403	
Cuttack	103	45	60	208(67.53)	22	36	42	100(32.46)	308	
Dhenkanal	255	62	131	448(68.92)	32	89	81	202(31.07)	650	
Ganjam	684	115	340	1139(54.97)	53	321	559	933(45.02)	2072	
Kalahandi	544	118	170	832(55.24)	34	81	559	674(44.76)	1506	
Keonjhar	689	96	172	957(77.05)	65	95	125	285(22.94)	1242	
Koraput	2945	599	1122	4666(61.99)	468	867	1525	2860(38.00)	7526	
Mayurbhanj	1435	576	756	2767(79.97)	196	291	206	693(20.02)	3460	
Phulbani	916	516	585	2017(69.67)	85	316	477	878 (30.32)	2895	
Puri	91	98	127	316(52.66)	18	82	184	284(47.33)	600	
Sambalpur	661	130	299	1090(68.65)	48	209	236	493(31.14)	1583	
Sundargarh	1108	521	804	2433(77.06)	240	302	182	724(22.93)	3157	
ORISSA	9833	3021	4749	17603(68.08)	1282	2760	4208	8250 (31.92)	25853	

( Note. 52 )

facilities. Only 39 habitations constituting 9.67 per cent were not served by primary schools within easy walking distance of 1 K.M. second in order comes Balasore district, 3rd Mayurbhanj district, 4th Sundargarh and 5th Keonjhar.

The largest number of habitations unserved by primary schools belong to Koraput district being 2860, next Ganjam 933, Phulbani 878, Sundargarh 724, Mayurbhanj 693, Kalahandi 674 and Sambalpur 493. When the percentage of unserved habitations is taken into consideration, Puri district comes in the first place - 284 habitations out of the total number of tribal habitations of 600 remain unserved which constitute 47.33 per cent. Next in order comes Ganjam district 45.02 per cent, then Kalahandi district 44.76 per cent, Koraput district 38.00 per cent, Cuttack district 32.46 per cent, Sambalpur 31.14 per cent, Phulbani 30.32 per cent, Dhenkanal 31.07 per cent etc.

Provision of schooling facilities within easy reach is a necessary precondition to spread of education. It is also the first step of executing the programme of universalisation of elementary education.

Out of 25853 tribal habitations in Orissa there are Middle schools in 786 habitations constituting 3.04 per cent. 2801 habitations are served by the existing M.E. Schools within a distance of one kilometre, 3643 are served within a distance of 2 K.Ms. and 3697 habitations are served within 2.1 to 3 K.M. distance. Thus 10927 habitations out of 25853 constituting 42.26 per cent are served within a distance of 3 K.Ms. 14926 habitations constituting 57.74 per cent are not served by Middle Schools. It is worth while to consider that 52 tribal habitations in the population slab 1000-1999 and 692 habitations in the population slab 500-999 do neither have middle schools within them nor are they served by existing middle schools within a distance of three K.Ms.

The districtwise position of provision of middle schools in the tribal habitations presents an interesting picture. 82.92 per cent of the tribal habitations of the District of Balasore are served by middle Schools.

TABLE - 11  
PROVISION OF MIDDLE SCHOOL FACILITIES IN TRIBAL HABITATIONS

	P o p u l a t i o n   S l a b					Total	Percentage
	5000 and above	2000 to 4999	1000 to 1999	500 to 999	Below 500		
With a Middle School - within the habitation	-	8	90	295	393	786	3.04
With a Middle School - within a distance of 1 K.M.	-	1	20	208	2572	2801	10.83
With a Middle School within 2 K.M.	-	-	22	298	3323	3643	14.09
With a Middle School within 3 K.M.	-	-	28	304	3365	3697	14.30
SUB-TOTAL	-	9	160	1105	9653	10927	42.26
With a Middle School within 3.1 to 4 K.M.	-	-	11	189	2313	2513	9.72
With a Middle School within 4.1 to 5 K.M.	-	-	18	160	2322	2500	9.67
With a Middle School beyond 5 K.M.	-	-	23	343	9547	9913	38.34
TOTAL	-	9	212	1797	23835	25853	100.00

( Note. 52 )

TABLE - 12  
 SCHEDULED TRIBE HABITATIONS WITH AND WITHOUT MIDDLE SCHOOLS/SECTIONS (DISTRICT-WISE)

Name of District	Within the habitation	Upto 1 K.M.	1.1 to 2 K.M.	2.1 to 3 K.M.	Upto 3 K.M.	P.C. Served	3.1 to 4 K.M.	4.1 to 5 K.M.	More than 5 K.M.	Total
Balasure	9	179	109	77	374	82.92	45	17	15	451
Bolangir	10	19	71	90	190	47.14	60	58	95	403
Cuttack	14	46	96	56	212	68.83	23	30	43	308
Dhenkanal	11	83	129	111	334	51.38	69	89	158	650
Ganjam	14	69	179	220	482	23.26	224	267	1099	2072
Kalahandi	25	74	102	165	366	24.30	118	100	922	1506
Keonjhar	95	147	268	230	740	59.58	114	100	288	1242
Koraput	125	295	543	775	1738	23.09	597	709	4482	7526
Mayurbhanj	195	712	799	719	2425	70.08	390	300	345	3460
Phulbani	46	304	336	364	1050	36.26	312	320	1213	2895
Puri	3	75	93	52	223	37.16	33	51	293	600
Sambalpur	71	170	277	300	818	51.67	210	182	373	1583
Sundargarh	165	628	641	538	1975	62.55	318	277	587	3157
ORISSA	786	2801	3643	3697	10927	42.26	2513	2500	9913	25853

(Note. 52)

Next in order comes the District of Mayurbhanj where 70.08 per cent and Sundargarh with 62.55 per cent of the tribal habitations served.

The lowest percentage of habitations served by middle schools is the District of Koraput (23.09 per cent). Ganjam and Kalahandi district have also very small number of habitations served by middle Schools being 23.26 per cent and 24.30 per cent respectively. Phulbani and Puri districts come under another category where 36.26 per cent and 37.16 per cent of the tribal habitations respectively are served by middle schools. Keonjhar with 59.58 per cent, Dhenkanal with 51.38 per cent, Sambalpur with 51.67 per cent, Bolangir with 47.14 per cent of the habitations served by middle schools constitute still another category.

Out of 25853 tribal habitations in the state there are secondary Schools only in 111 habitations which constitute 0.42 per cent. 1398 habitations are served by secondary schools within 2 K.Ms. distance. 3244 habitations are served within 4 K.M., 3115 habitations within 6 K.M. and 2514 habitations within 8 K.Ms. Thus total number of tribal habitations served by secondary schools within 8 K.Ms. distance comes to 10922 which constitute 42.24 per cent of the total number of habitations.

14931 tribal habitations constituting 57.76 per cent are not served by any secondary school even within 8 K.M. distance. 61 habitations in the population slab of 1000-1999 and 726 habitations in 500-999 population slab have neither high schools in their own habitations nor are they served by any other high school within a distance of 8 K.M.

In respect of provision of schooling facilities at the secondary stage the three tribal districts namely, Koraput, Phulbani and Kalahandi are at a very disadvantaged position. 21.8 per cent tribal habitations of Koraput, 25.97 per cent of Phulbani and 25.56 per cent Kalahandi district are served by secondary schools within a distance of 8.00 K.Ms, 33.88 per

TABLE - 13  
 PROVISION OF SECONDARY SCHOOL FACILITIES  
 SCHEDULED TRIBE HABITATIONS WITH AND WITHOUT SECONDARY SCHOOLS

	POPULATION SLAB					Total	Percentage
	5000 and above	2000 to 4999	1000 to 1999	500 to 999	Below 500		
With a secondary school in the habitation	-	4	20	40	47	111	0.42
With a secondary school within 2 K.M.	-	3	26	173	1736	1938	7.49
With a secondary school within 4 K.M.	-	-	33	330	2881	3244	12.54
With a secondary school within 6 K.M.	-	2	45	313	2755	3115	12.04
With a secondary school within 8 K.M.	-	-	27	215	2272	2514	9.27
SUB-TOTAL	-	9	151	1071	9691	10922	42.24
With a secondary school at more than 8 K.M.	-	-	61	726	14144	14931	57.75
TOTAL	-	9	212	1797	23835	25853	100

( Note. 52 )

TABLE - 14  
INTERDISTRICT DISPARITY IN PROVISION OF SECONDARY SCHOOLS IN TRIBAL HABITATIONS

Name of district	Within the habitation	Upto 2 K.M.	2.1 to 4 K.M.	4.1 to 6 K.M.	6.1 to 8 K.M.	Upto 8 K.M.	P.C. served	More than 8 K.M.	P.C. not served	Total
Balasore	-	108	166	78	27	379	84.03	72	15.96	451
Bolangir	2	29	55	66	63	215	53.34	188	46.65	403
Cuttack	1	48	94	92	20	255	82.79	53	17.70	308
Dhenkanal	2	61	117	101	84	365	56.15	285	43.84	650
Ganjam	-	74	180	250	198	702	33.88	1370	66.11	2072
Kalahandi	2	39	104	138	102	385	25.56	1121	74.43	1506
Keonjhar	13	144	177	179	138	651	52.41	591	47.58	1242
Koraput	8	194	430	500	509	16.41	21.80	5885	78.20	7526
Mayurbhanj	37	593	854	644	469	2597	75.05	863	24.95	3460
Phulbani	2	88	151	242	269	752	25.97	2143	74.02	2895
Puri	1	45	63	59	53	221	36.83	379	63.16	600
Sambalpur	10	116	259	275	182	842	53.20	741	46.80	1583
Sundargarh	33	399	594	491	400	1917	60.72	1240	39.28	3157
ORISSA	111	1938	3244	3115	2514	10922	42.25	14931	57.75	25853

( Note . 52 )



cent of Ganjam and 36.83 per cent habitations of Puri district are served by secondary schools within 8 K.Ms. Maximum percentage of tribal habitations (84.03 per cent) of Balasore district are served by high schools closely followed by Cuttack (82.79 per cent).

The criteria of population and distance are good enough for the plain areas of the coastal districts. If these are strictly adhered to in the tribal districts and tribal areas of the coastal districts, practically educational facilities cannot be provided to the children of the tribal areas for various reasons.

1. Coverage of distance of 1 K.M. for primary school children 3 K.M. for middle schools and 8 K.Ms. for high school children is not free from risk in the forests. No parent would like to enrisk the life of his child for education.

2. Tribal settlement pattern is very peculiar. The houses are quite apart from one another. A population of 6000 cannot be available in an area of 64 square kilometres although a large number of small habitations might be located. No school is likely to be fed by the requisite number of day-scholars. In order to make educational institutions viable and functional it is necessary to either open residential schools or residential facilities may be attached with the existing schools. Government of Orissa realised the necessity of providing residential facilities to at least one primary school in a Gram Panchayat and made provisions for hostels only recently. At the middle school and high school stage more residential Ashram/high schools are to be opened so as to bring the tribal children to the fold of education. It is relevant to mention that all the middle and high schools of the H & T.W. Department with residential facilities are functioning with full strength.